

Checklist of flesh flies of Turkey (Diptera, Sarcophagidae)

Yury Verves¹, Miroslav Barták², Štěpán Kubík²

1 *Institute for Evolutionary Ecology, National Academy of Sciences of Ukraine, Academician Lebedev Str. 37 Kyiv, 03143, Ukraine* **2** *Department of Zoology and Fisheries, Faculty of Agrobiological Sciences, Food and Natural Resources, Czech University of Life Sciences, Prague, Kamýcká 129, 165 00 Praha Suchbátka, Czech Republic*

Corresponding author: Štěpán Kubík (kubik@af.czu.cz)

Academic editor: P. Cerretti | Received 2 November 2017 | Accepted 13 February 2018 | Published 14 March 2018

<http://zoobank.org/5F70542A-A6DB-41CE-9CA3-A794CFB74E70>

Citation: Verves Y, Barták M, Kubík Š (2018) Checklist of flesh flies of Turkey (Diptera, Sarcophagidae). ZooKeys 743: 95–136. <https://doi.org/10.3897/zookeys.743.22022>

Abstract

A checklist of 153 flesh fly species (Diptera, Sarcophagidae) recorded to date from Turkey is presented. Updating the list was necessary due to the numerous recent records. Records are listed according to provinces.

Keywords

checklist, distribution, Sarcophagidae, Turkey

Introduction

The first reviews of Turkish Sarcophagidae were compiled by Verves (1986a, b) and Kara and Pape (2002), and they listed a total of 85 and 81 species, respectively. However, the true number of Turkish sarcophagids may well range from 175 to 250 species. For a comprehensive list of papers dealing with Turkish flesh fly fauna, consult Verves et al. (2017) or citations below. The need to elaborate the checklist of Turkish sarcophagids became evident after the authors presented numerous new records for Turkey and individual Turkish provinces (Verves et al. 2017).

Materials and methods

Subfamilies, genera, and species are arranged in the order of the catalogue of Verves (1986a) with subsequent additions (Povolný and Verves 1997; Verves 1986b, 2001a, b; Verves and Khrokalo 2006a, b, 2007, 2009, 2014a, b, 2015; Verves et al. 2015a, b; Xue and Verves 2009; Xue et al. 2011, 2015). We are aware of conflicts between this conception and recent molecular studies (e.g. Piwczyński et al. 2017; Buenaventura and Pape 2017), so we used more traditional approach.

Distributional data of sarcophagids in Turkey were compiled analysing all the available publications (see references below). General species distribution was derived mostly from Pape (1996); Pape et al. (2015); Povolný and Verves (1997); Verves and Khrokalo (2006a, b, 2009, 2015); Verves et al. (2015b); Xue et al. (2011, 2015). Additional sources were as follows: Pape et al. (2002), Abasa (1970); Abd-AlGalil and Zambare (2016); Abdul-Rassoul et al. (2004); Al-Ghzawi et al. (2009); Al-Mesbah et al. (2012); Aldrich (1916); Amoudi (1993); Arnaud (1975); Arthur and Coppel (1953); Baranov (1929, 1938, 1942); Barnett and Emms (1998); Beaver (1986); Bezzi (1913, 1915, 1921); Blackith et al. (1997); Boscarelli and Sandri 2016); Brèthes (1908); Brimley (1938); Brink (2009); Britton (1921); Britvec (2000); Bruce and Knipling (1936); Bryan (1926); Buckell and Spencer (1945); Byers (1962); Calero (1948); Carles-Tolrá and Rosado 2009); Chaiwong et al. (2009); Clausen (1978); Cockerell (1905); Coe (1960, 1962); Criddle (1927); Curran (1929); Davis (1971); Dear (1980); Demyanova et al. (2007); Diaz and Kaufman (2011); Disney (1973); El-Hawagry et al. (2016); Feng et al. (2012); Fetene and Worku (2009); Frost et al. (2010); Gatt and Ebejer (2014)); Goff (1991); Goff and Odom (1987); Grabovac and Pertič (2005); Grigorian (1988); Hardy (1980); Ho (1938); Hutson (1981); James (1947); Johnson (1912); Kano et al. (1999); Kehlmaier (1998); Khan and Khan (1984); Krishnamurti and Usman (1955); Krüger et al. (2003); Kurahashi and Chaiwong (2013); Kurahashi and Kakinuma (2015); Kurahashi and Leh (2007); Kurahashi and Tan (2009); Lehrer (1975, 1996, 1999a, 2000, 2003, 2006b, 2007, 2008b); Lehrer and Oprisan (2012); Lopes (1958, 1959, 1961, 1967); Ma et al. 2014); Magnarelli and Andreadis (1981); Martínez-Sanchez et al. (2000); Maurya et al. (2012); Meiklejohn (2012); Nandi (2002, 2005); Nash (2005); Nazni et al. (2007); Nishida (2008); Pai et al. (2014); Pakalniškis and Podénas (1992); Pape (1991, 2004); Pape et al. (2002); Parker (1914); Peris et al. (1999); Pohjoismäki and Kahanpää (2014); Popov (1959); Povolný (1978, 1987, 1992, 1999); Povolný and Hula (2004); Prado e Castro et al. (2010); Rebelo et al. (2014); Rees (1985); Reed (1974); Richet et al. (2011); Rohdendorf (1937, 1975); Rouse (1967); Salem (1935, 1946); Senior-White et al. (1940); Shazia et al. (2006); Shinonaga (2001, 2004); Shinonaga and Thinh (2003); Sijstermans (2012); Silahuddin et al. (2015); Sinha (2014); Sisojević and Čepelák (1998); Sjöstedt (1935); Soler-Cruz (2000); Spuris (1976); Strickland (1938); Strukan (1968, 1970); Sucharit et al. (1976); Sugiyama et al. (1987, 1988); Szpila (2010); Tan et al. (2010); Thinh (1988, 2004); Tschirnhaus et al. (2000); Tucker (1906); Udgaonkar et al. (2012); Vairo et al. (2011); Verves (1978, 2001b, 2003, 2007); Verves et al. (2015a); Verves and Khrokalo (2014a, b); Wang et al. (2009); Webster (1907); Wei (2007); Whit-

more (2009, 2011); Whitmore et. al (2013); Williams (1956); Wobeser et al. (1981); Wyatt (1991); Wyatt and Falk (1995); Zaidi et al. (2011, 2016); Zerova et al. (2006); Zhang D et al. (2016); Zhang B et al. (2010); Zhang Q et al. (2014); Zumpt (1972).

Abbreviations: Provinces are abbreviated as follows: Adana (AD), Adiyaman (ADI), Afyon (AF), Ağrı (AG), Amasya (AM), Ankara (AN), Antalya (ANT), Artvin (AR), Aydın (AY), Batman (BT), Bayburt (BY), Bolu (BO), Burdur (BU), Bursa (BS), Diyarbakir (DB), Elazığ (EL), Çanakkale (CA), Denizli (DE), Düzce (DU), Edirne (ED), Erzincan (ER), Erzurum (ERZ), Eskişehir (ES), Gaziantep (GA), Hakkâri (HA), Hatay (HT), Iğdır (IG), Isparta (IP), Istanbul (IS), İzmir (IZ), Karaman (KM), Kars (KAR), Kayseri (KY), Kırıkkale (KI), Konya (KN), Manisa (MN), Mardin (MR), Mersin (ME), Muğla (MG), Nevşehir (NE), Samsun (SA), Şanlıurfa (SN), Tokat (TO), Trabzon (TB), Van (VA).

Checklist

Subfamily MACRONYCHIINAE Brauer & Bergenstamm, 1889

1. *Macronychia* (s. str.) *lemariei* Jacentkovský, 1941

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): **AN** (Koçak & Kemal 2009, 2013, 2015), **KI** (Koçak and Kemal 2009, 2013, 2015).

Distribution: Palaearctic.

2. *Macronychia* (s. str.) *striginervis* (Zetterstedt, 1838)

Distribution in Turkey: (Koçak 2014): **ERZ** (Koçak and Kemal 2015; Pekbey 2011; Pekbey and Hayat 2013b).

Distribution: Palaearctic-Afrotropical.

3. *Macronychia* (*Moschusa*) *polyodon* (Meigen, 1824)

Distribution in Turkey: (Koçak 2014): **ERZ** (Koçak and Kemal 2015; Pekbey 2011; Pekbey and Hayat 2013b).

Distribution: Palaearctic-Oriental.

Subfamily MILTOGRAMMINAE Brauer & Bergenstamm, 1889

4. *Senotainia* (*Arrenopus*) *albifrons* (Rondani, 1859)

Distribution in Turkey: **ANT** (Koçak and Kemal 2009, 2012, 2015; Kara and Pape 2002); **AY** (Verves et al. 2017), **MG** (Verves et al. 2017), **SA** (Verves et al. 2017).

Distribution: Palaearctic-Afrotropical-Oriental.

5. *Senotainia* (s. str.) *conica* (Fallén, 1810)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): **KN** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015).

Distribution: Palaearctic.

6. *Senotainia* (s. str.) *deserta* Rohdendorf, 1935

Distribution in Turkey: (Zerova et al. 2006).

Distribution: Palaearctic.

7. *Senotainia* (s. str.) *tricuspis* (Meigen, 1838)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): **ME** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015).

Distribution: Palaearctic.

8. *Protomiltogramma fasciata* (Meigen, 1824)

Distribution in Turkey: **ANT** (Kara and Pape 2002; Koçak and Kemal 2009, 2012, 2015).

Distribution: Palaearctic.

9. *Pterella grisea* (Meigen, 1824)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): **KY** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015).

Distribution: Palaearctic.

10. *Miltogramma aurifrons* Dufour, 1850

Distribution in Turkey: **MG** (Verves et al. 2017).

Distribution: Mediterranean.

11. *Miltogramma brevipila* Villeneuve, 1911

Distribution in Turkey: **AY** (Verves et al. 2017).

Distribution: West-Central Palaearctic.

12. *Miltogramma germari* Meigen, 1824

Distribution in Turkey: (Kara and Pape 2002; Koçak 2014; Koçak and Kemal 2009, 2012, 2015).

Distribution: Palaearctic.

13. *Miltogramma murina* Meigen, 1824

Distribution in Turkey: (Povolný and Verves 1997): **MG** (Verves et al. 2017).

Distribution: West Palaearctic.

14. *Miltogramma oestracea* (Fallén, 1820)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): **ANT** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015) **TO** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015).

Distribution: Palaearctic.

15. *Miltogramma testaceifrons* (Roser, 1840)

Distribution in Turkey: MG (Verves et al. 2017).

Distribution: Palaearctic-Oriental.

16. *Miltogramma turkmenora* Rohdendorf, 1930

Distribution in Turkey: MG (Verves et al. 2017).

Distribution: East Mediterranean-Mid-Asiatic.

17. *Miltogrammidium taeniatum* (Meigen, 1824)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): **BU** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015), **TO** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015), **VA** (Kemal and Koçak 2017).

Distribution: Palaearctic-Oriental.

18. *Craticulina barbifera* (Pandellé, 1895)

Distribution in Turkey: MG (Verves et al. 2017).

Distribution: Mediterranean.

19. *Craticulina tabaniformis* (Fabricius, 1805)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012, Verves 1993a): **ANT** (Koçak and Kemal 2009, 2013, 2015).

Distribution: Palaearctic-Oriental.

20. *Apodacra dispar* Villeneuve, 1916

Distribution in Turkey: **AY** (Verves et al. 2017), **MG** (Verves et al. 2017).

Distribution: Palaearctic-Afrotropical.

21. *Apodacra pulchra* Egger, 1861

Distribution in Turkey: **KY** (Koçak and Kemal 2015; Verves et al. 2015b).

Distribution: Palaearctic.

22. *Apodacra radchenkoi* Verves & Khrokalo, 2015

Distribution in Turkey: **ANT** (Koçak and Kemal 2015; Verves et al. 2015b).

Distribution: Anatolian.

23. *Apodacra seriemaculata* Macquart, 1854

Distribution in Turkey: (Zeroova et al. 2006): **ES** (Koçak and Kemal 2015).

Distribution: Palaearctic.

24. *Sphecatodes ornatus* Villeneuve, 1912

Distribution in Turkey: **MG** (Verves et al. 2017).

Distribution: East Mediterranean-Mid-Asiatic.

25. *Metopodia pilicornis* (Pandellé, 1895)

Distribution in Turkey: (Kara and Pape 2002; Koçak 2014 – as *M. grisea*; Koçak and Kemal 2009 – as *M. pilicornis*; 2012, 2013, 2015 – as *M. grisea*): **MG** (Verves et al. 2017).

Distribution: Palaearctic.

26. *Phylloteles pictipennis* Löw, 1844

Distribution in Turkey: (Kara and Pape 2002; Koçak and Kemal 2009, 2012, 2013, 2015): **MG** (Löw 1844).

Distribution: Palaearctic-Oriental.

27. *Amobia oculata* (Zetterstedt, 1844)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): **ANT** (Kara and Pape 2002; Koçak and Kemal 2009), **ERZ** (Koçak and Kemal 2015; Pekbey 2011; Pekbey and Hayat 2013b), **TO** (Kara and Pape 2002).

Distribution: Holarctic-Oriental.

28. *Amobia signata* (Meigen, 1824)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): **ANT** (Kara and Pape 2002; Koçak and Kemal 2009, 2015), **ERZ** (Koçak and Kemal 2015; Pekbey 2011; Pekbey and Hayat 2013b), **MG** (Verves et al. 2017), **TO** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015).

Distribution: Palaearctic-Oriental.

29. *Metopia argyrocephala* (Meigen, 1824)

Distribution in Turkey: (Kara and Pape 2002; Koçak 2014; Koçak and Kemal 2009, 2012, 2015): **AY** (Verves et al. 2017), **MG** (Verves et al. 2017), **SA** (Verves et al. 2017).

Distribution: Palaearctic-Nearctic-Oriental-Neotropical.

30. *Metopia grandii* Venturi, 1953

Distribution in Turkey: **MG** (Verves et al. 2017).

Distribution: Palaearctic.

31. *Phrosinella (Asiometopia) kozlovi* (Rohdendorf, 1925)

Distribution in Turkey: **IG** (Verves and Khrokalo 2017)

Distribution: Palaearctic.

32. *Phrosinella (Asiometopia) tadzhika* (Rohdendorf, 1935)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): **KN** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015), **TO** (Kara and Pape 2002).

Distribution: Palaearctic.

33. *Phrosinella* (s. str.) *nasuta* (Meigen, 1824)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): **BU** (Kara and Pape 2002), **KN** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015), **MG** (Verves et al. 2017), **TO** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015).

Distribution: Palaearctic.

34. *Sphenometopa* (*Euaraba*) *bifasciata* (Brauer & Bergenstamm, 1891)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2009, 2012): **BS** (Brauer et Bergenstamm 1891; Kara and Pape 2002; Koçak and Kemal 2015), **VA** (Koçak and Kemal 2013, 2015).

Distribution: East Mediterranean-Mid-Asiatic.

35. *Sphenometopa* (*Euaraba*) *claripennis* (Villeneuve, 1933)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): **KN** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015), **NE** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015).

Distribution: East Mediterranean-Mid-Asiatic.

36. *Sphenometopa* (*Euaraba*) *manni* (Brauer & Bergenstamm, 1891)

Distribution in Turkey: (Koçak 2014; Kara and Pape 2002; Koçak 2014; Koçak and Kemal 2012, 2013, 2015).

Distribution: East Mediterranean.

37. *Sphenometopa* (*Xantharaba*) *steini* (Schiner, 1862)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): **ANT** (Koçak and Kemal 2009, 2013, 2015), **MG** (Verves et al. 2017), **VA** (Kemal and Koçak 2017).

Distribution: East Mediterranean.

38. *Paragusia elegantula* (Zetterstedt, 1844)

Distribution in Turkey: (Kara and Pape 2002; Koçak 2014; Koçak and Kemal 2009, 2012, 2013, 2015): **MG** (Verves et al. 2017).

Distribution: Palaearctic.

39. *Paragusia multipunctata* (Rondani, 1859)

Distribution in Turkey: **MG** (Verves et al. 2017).

Distribution: Palaearctic-Afrotropical-Oriental.

40. *Taxigramma heteroneura* (Meigen, 1830)

Distribution in Turkey: (Kara and Pape 2002; Koçak 2014; Koçak and Kemal 2009, 2012, 2013, 2015): **AY** (Verves et al. 2017), **MG** (Verves et al. 2017).

Distribution: Holarctic-Oriental.

Subfamily PARAMACRONYCHIINAE Brauer & Bergenstamm, 1889**41. *Nyctia halterata* (Panzer, 1798)**

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): **AM** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015), **AY** (Verves et al. 2017), **MG** (Verves et al. 2017), **TO** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015).

Distribution: West Palaearctic.

42. *Nyctia lugubris* (Macquart, 1843)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): **BU** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015), **MG** (Verves et al. 2017), **SA** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015).

Distribution: Submediterranean.

43. *Agria affinis* (Fallén, 1817)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): **IP** (Koçak and Kemal 2009, 2013, 2015), **TO** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015).

Distribution: Palaearctic.

44. *Agria mamillata* (Pandellé, 1896)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): **AN** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015), **ES** (Koçak and Kemal 2009, 2013, 2015).

Distribution: Palaearctic.

45. *Angiometopa falleni* Pape, 1986

Distribution in Turkey: (Koçak 2014): **ERZ** (Koçak and Kemal 2015; Pekbey 2011; Pekbey and Hayat 2013b).

Distribution: Palaearctic.

46. *Brachicoma devia* (Fallén, 1820)

Distribution in Turkey: (Koçak 2014): **ERZ** (Koçak and Kemal 2015; Pekbey 2011; Pekbey and Hayat 2013b).

Distribution: Holarctic-Oriental.

47. *Sarcophila canaanita* Lehrer, 2007

Distribution in Turkey: **ANT** (Verves et al. 2017), **AY** (Verves et al. 2017), **MG** (Verves et al. 2017).

Distribution: East Mediterranean.

48. *Sarcophila latifrons* (Fallén, 1817)

Distribution in Turkey: (Aksoy and Bahadıroğlu 2012; Koçak 2014; Koçak and Kemal 2012): **AD** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015), **ADI**

(Gözüaçık and Mart 2009), **BT** (Gözüaçık and Mart 2009), **MR** (Gözüaçık and Mart 2009), **MG** (Verves et al. 2017), **SN** (Gözüaçık and Mart 2009; Kara and Pape 2002; Koçak and Kemal 2009, 2015).

Distribution: Palaearctic.

49. *Sarcophila meridionalis* Rohdendorf & Verves, 1982

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): **ER** (Koçak and Kemal 2015; Pekbey 2011; Pekbey and Hayat 2013b), **ERZ** (Koçak and Kemal 2013, 2015; Pekbey 2011; Pekbey and Hayat 2010, 2013b), **MG** (Verves et al. 2017).

Distribution: West-Central Palaearctic.

50. *Wohlfahrtia bella* (Macquart, 1839)

Distribution in Turkey: (Kara and Pape 2002; Koçak 2014; Koçak and Kemal 2009, 2012): **AG** (Koçak and Kemal 2015), **BY** (Koçak and Kemal 2015; Pekbey 2011; Pekbey and Hayat 2013b), **ERZ** (Koçak and Kemal 2015; Pekbey and Hayat 2010).

Distribution: Palaearctic-Afrotropical.

51. *Wohlfahrtia magnifica* (Schiner, 1862)

Distribution in Turkey: (Dinçer 1997; Dinçer et al. 2001; Koçak 2014; Koçak and Kemal 2009, 2012, 2013; Kurtpınar 1950): **AF** (Köse et al. 2013), **AN** (Açıkgöz et al. 2011; Çiftçioglu et al. 1997), **DB** (İpek and Şaki 2010), **EL** (Bayındır et al. 2010; Kökçam and Şaki 2005; Şaki 2004; Şaki and Özer 1999a, b), **ERZ** (Büyükkurt et al. 2008; Gümüşsoy et al. 2015; Kara and Arslan 2011; Koçak and Kemal 2015; Pekbey 2011; Pekbey and Hayat 2010, 2013b; Yazgi et al. 2009), **GA** (Özdemir et al. 2014), **HT** (Çevik et al. 2014), **IS** (Karaman et al. 2009), **IZ** (Ütük 2006), **KAR** (Akduman et al. 2010), **KI** (Aydenizöz and Dik 2008; Dik et al. 2012), **KN** (Dik et al. 2012; Övet et al. 2012; Özsoy et al. 2013), **SA** (Atmaca et al. 2009), **SN** (Sevgili et al. 2004), **TO** (Tuygun et al. 2009), **VA** (Kılınç et al. 2013; Yuca et al. 2005).

Distribution: Palaearctic-Afrotropical-Oriental.

52. *Wohlfahrtia meigeni* (Schiner, 1862)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): **ERZ** (Koçak and Kemal 2015; Pekbey 2011; Pekbey and Hayat 2013b), **KY** (Hayat et al. 2008; Koçak and Kemal 2009, 2013, 2015).

Distribution: Holarctic-Oriental.

53. *Wohlfahrtia nuba* (Wiedemann, 1830)

Distribution in Turkey: **SN** (Sevgili et al. 2004).

Distribution: Palaearctic-Afrotropical-Oriental.

54. *Wohlfahrtia trina* (Wiedemann, 1830)

Distribution in Turkey: SN (Sevgili et al. 2004).

Distribution: Palaearctic-Afrotropical-Oriental.

Subfamily SARCOPHAGINAE Macquart, 1935**55. *Agriella lindneri* (Rohdendorf, 1937)**

Distribution in Turkey: (Kara and Pape 2002; Koçak 2014; Koçak and Kemal 2009, 2012): **KN** (Kara and Pape 2002; Koçak and Kemal 2013, 2015; Rohdendorf 1937; Verves 1985).

Distribution: Anatolian.

56. *Blaesoxipha batilligera* Séguy, 1941

Distribution in Turkey: **BY** (Pekbey 2011; Pekbey and Hayat 2013c), **ERZ** (Pekbey 2011; Pekbey and Hayat 2013c), **KAR** (Pekbey and Eroğlu 2017).

Distribution: West Palaearctic.

57. *Blaesoxipha calliste* Pape, 1994

Distribution in Turkey: (Kara and Pape 2002; Koçak 2014; Koçak and Kemal 2009, 2012): **BS** (Kara and Pape 2002; Pape 1994), **IP** (Ebejer 2000).

Distribution: Anatolian.

58. *Blaesoxipha cochlearis* (Pandellé, 1896)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): **AM** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015; Pekbey and Hayat 2013c), **AR** (Pekbey and Eroğlu 2017), **ERZ** (Pekbey 2011; Pekbey and Hayat 2010, 2013c). **KAR** (Pekbey and Eroğlu 2017).

Distribution: Palaearctic.

59. *Blaesoxipha confusa* Villeneuve, 1912

Distribution in Turkey: SN (Verves et al. 2017).

Distribution: West Palaearctic.

60. *Blaesoxipha dupuisi* J. Léonide & J. –C. Léonide, 1973

Distribution in Turkey: **BY** (Pekbey 2011; Pekbey and Hayat 2013c), **ERZ** (Pekbey 2011; Pekbey and Hayat 2013c).

Distribution: Palaearctic.

61. *Blaesoxipha grylloctona* Löw, 1861

Blaesoxipha (s. str.) *laticornis*: Pekbey 2011: 75, 76, 92.

Distribution in Turkey: (Koçak and Kemal 2015; Pape, 1994): **ER** (Pekbey and Hayat 2013c), **ERZ** (Pekbey and Hayat 2010, 2013c).

Distribution: Palaearctic.

62. *Blaesoxipha laticornis* (Meigen, 1826)

Distribution in Turkey: (Kara and Pape 2002; Koçak 2014; Koçak and Kemal 2009 – as *B. laticornis* & *B. plumicornis* (as 2 different species), 2012, 2013, 2015 – as *B. gladiatrix*), **BY** (Pekbey 2011 – as *B. plumicornis*; Pekbey and Hayat 2013c), **ER** (Pekbey 2011 – as *B. plumicornis*; Pekbey and Hayat 2013c), **ERZ** (Pekbey 2011 – as *B. plumicornis*; Pekbey and Hayat 2010, 2013c), **IG** (Pekbey and Eroğlu 2017), **KAR** (Pekbey and Eroğlu 2017).

Distribution: Palaearctic.

63. *Blaesoxipha lautaretensis* Villeneuve, 1928

Distribution in Turkey: (Kara and Pape 2002; Koçak 2014; Koçak and Kemal 2009, 2012, 2013, 2015).

Distribution: Palaearctic-Oriental.

64. *Blaesoxipha litoralis* (Villeneuve, 1911)

Distribution in Turkey: (Kara and Pape 2002; Koçak 2014; Koçak and Kemal 2009, 2012): **ER** (Koçak and Kemal 2013, 2015; Pekbey 2011; Pekbey and Hayat 2013c), **ERZ** (Koçak and Kemal 2013, 2015; Pekbey 2011; Pekbey and Hayat 2013c), **IG** (Pekbey and Eroğlu 2017), **KAR** (Pekbey and Eroğlu 2017).

Distribution: Palaearctic.

65. *Blaesoxipha pygmaea* (Zetterstedt, 1844)

Distribution in Turkey: (Kara and Pape 2002; Koçak 2014; Koçak and Kemal 2009; 2012): **AR** (Pekbey and Eroğlu 2017), **BY** (Koçak and Kemal 2013; Pekbey 2011; Pekbey and Hayat 2013c), **ER** (Koçak and Kemal 2013; Pekbey 2011; Pekbey and Hayat 2013c).

Distribution: Palaearctic-Afrotropical-Oriental.

66. *Blaesoxipha redempta* (Pandellé, 1896)

Distribution in Turkey: (Kara and Pape 2002; Koçak 2014; Koçak and Kemal 2009 – as *B. lapidosa*, see comment in Verves et al. 2017): **AR** (Pekbey and Eroğlu 2017), **BY** (Pekbey 2011; Pekbey and Hayat 2013c), **CA** (Calvert 1882), **ER** (Pekbey 2011 – as *B. lapidosa*; Pekbey and Hayat 2013c), **ERZ** (Pekbey 2011; Pekbey and Hayat 2010, 2013c), **IG** (Pekbey and Eroğlu 2017), **KAR** (Pekbey and Eroğlu 2017), **MG** (Verves et al. 2017), **SA** (Verves et al. 2017).

Distribution: Palaearctic-Afrotropical-Oriental-Australasian/Oceanian

67. *Blaesoxipha rufipes* (Macquart, 1839)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012 – as *B. filipjevi*): **ANT** (Kara and Pape 2002; Koçak and Kemal 2009 – as *B. rufipes*, 2013, 2015), **AR** (Pekbey and Eroğlu 2017), **BY** (Pekbey 2011; Pekbey and Hayat 2013c), **ER** (Pekbey 2011; Pekbey and Hayat 2013b), **ERZ** (Pekbey 2011; Pekbey and Hayat 2013c), **KAR** (Pekbey and Eroğlu 2017).

Distribution: Palaearctic-Afrotropical-Oriental-Australasian/Oceanian.

68. *Blaesoxipha unguolata* (Pandellé, 1896)

Distribution in Turkey: (Kara and Pape 2002; Koçak 2014; Koçak and Kemal 2009, 2012): **ERZ** (Koçak and Kemal 2013; Pekbey 2011; Pekbey and Hayat 2013c).

Distribution: West Palaearctic.

69. *Blaesoxipha unicolor* (Villeneuve, 1912)

Distribution in Turkey: **AR** (Pekbey and Eroğlu 2017), **ER** (Pekbey 2011; Pekbey and Hayat 2013c), **ERZ** (Pekbey 2011; Pekbey and Hayat 2013c), **KAR** (Pekbey and Eroğlu 2017).

Distribution: Palaearctic-Oriental.

70. *Servaisia* (s. str.) *erythrura* (Meigen, 1826)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): **AR** (Pekbey and Eroğlu 2017), **ERZ** (Koçak and Kemal 2013, 2015; Pekbey 2011; Pekbey and Hayat 2010, 2013c).

Distribution: Palaearctic.

71. *Servaisia* (s. str.) *rossica* (Villeneuve, 1912)

Distribution in Turkey: **ERZ** (Pekbey 2011; Pekbey and Hayat 2013c).

Distribution: Palaearctic.

72. *Servaisia* (s. str.) *rybaltshenkoi* (Verves, 1977)

Blaesoxipha ataturkia Lehrer, 2008a: 25.

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): **HA** (Kemal and Koçak 2015; Koçak and Kemal 2013; Lehrer 2008a).

Distribution: Palaearctic.

73. *Tephromyia grisea* (Meigen, 1826)

Distribution in Turkey: **ERZ** (Pekbey 2011; Pekbey and Hayat 2013c).

Distribution: Palaearctic.

74. *Ravinia pernix* (Harris, 1780)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): **AD** (Aslan and Çalışkan 2009; Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015), **AY** (Verves et al. 2017), **ER** (Pekbey 2011), **ERZ** (Pekbey 2011; Pekbey and Hayat 2010), **ES** (Aslan, 2006; Aslan and Çalışkan 2009), **IG** (Pekbey and Eroğlu 2017), **KAR** (Pekbey and Eroğlu 2017), **KY** (Hayat et al. 2008; Koçak and Kemal 2009, 2013, 2015), **KN** (Aslan 2006; Hayat et al. 2008; Kara and Pape 2002; Koçak and Kemal 2013, 2015), **ME** (Aslan 2006; Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015), **MG** (Verves et al. 2017), **SN** (Sevgili et al. 2004), **TO** (Aslan 2006; Hayat et al. 2008; Kara et Pape 2002; Koçak and Kemal 2009, 2013, 2015).

Distribution: Palaearctic-Afrotropical-Oriental.

75. *Sarcotachinella sinuata* (Meigen 1826)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): **AM** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015), **ER** (Pekbey 2011), **ERZ** (Pekbey 2011), **KY** (Hayat et al. 2008; Koçak and Kemal 2009, 2013, 2015), **MG** (Verves et al. 2017), **TO** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015).

Distribution: Holarctic.

76. *Helicophagella* (s. str.) *bellae* (Lehrer, 2000).

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): **ANT** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015), **BU** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015), **KM** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015); **MG** (Verves et al. 2017).

Distribution: East Mediterranean.

77. *Helicophagella* (s. str.) *crassimargo* (Pandellé, 1896)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): **AM** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015), **AY** (Verves et al. 2017), **BY** (Pekbey 2011), **ER** (Pekbey 2011), **ERZ** (Pekbey 2011; Pekbey and Hayat 2010), **KY** (Hayat et al. 2008; Koçak and Kemal 2009, 2013, 2015), **MG** (Verves et al. 2017), **TO** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015).

Distribution: Palaearctic.

78. *Helicophagella* (s. str.) *novella* (Baranov, 1929)

Distribution in Turkey: **MG** (Verves et al. 2017), **SA** (Verves et al. 2017).

Distribution: West Palaearctic.

79. *Helicophagella* (s. str.) *noverca* (Rondani, 1860)

Distribution in Turkey: **ES** (Aslan, 2006; Aslan and Çalışkan 2009), **SA** (Verves et al. 2017).

Distribution: West Palaearctic.

80. *Helicophagella* (s. str.) *novercoides* (Böttcher, 1913)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): **ANT** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015), **ERZ** (Pekbey 2011), **MG** (Verves et al. 2017).

Distribution: West Palaearctic.

81. *Helicophagella* (*Parabellieria*) *dreyfusi* (Lehrer, 1994).

Distribution in Turkey: (Kara and Pape 2002; Koçak 2014; Koçak and Kemal 2012, 2013, 2015).

Distribution: Palaearctic-Oriental.

82. *Helicophagella (Parabellieria) macrura* (Rohdendorf, 1937)

Distribution in Turkey: AY (Verves et al. 2017).

Distribution: Palaearctic.

83. *Helicophagella (Parabellieria) maculata* (Meigen, 1835)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012, 2015).

Distribution: West Palaearctic.

84. *Helicophagella (Parabellieria) melanura* (Meigen, 1926)

Distribution in Turkey: (Kara and Pape 2002; Koçak 2014; Koçak and Kemal 2012): **ANT** (Verves et al. 2017), **AY** (Verves et al. 2017), **BY** (Pekbey 2011), **ER** (Pekbey 2011), **ERZ** (Pekbey 2011; Pekbey and Hayat 2010), **ES** (Aslan 2006; Aslan and Çalışkan 2009; Koçak and Kemal 2009, 2015), **IG** (Pekbey and Eroğlu 2017), **KAR** (Pekbey and Eroğlu 2017), **KY** (Hayat et al. 2008; Kara and Pape 2002; Koçak and Kemal 2009, 2015), **MG** (Verves et al. 2017), **SA** (Verves et al. 2017), **SN** (Hayat et al. 2008; Koçak and Kemal 2009, 2015), **TO** (Aslan 2006; Kara and Pape 2002).

Distribution: Palaearctic-Nearctic-Afrotropical-Oriental.

85. *Helicophagella (Parabellieria) pachyura* (Rohdendorf, 1937)

Distribution in Turkey: (Koçak, 2014): **BY** (Pekbey 2011), **ER** (Pekbey 2011), **ERZ** (Koçak and Kemal 2012, 2013, 2015; Pekbey 2011; Pekbey and Hayat 2010), **IG** (Pekbey and Eroğlu 2017), **KAR** (Pekbey and Eroğlu 2017).

Distribution: Mid-Eastern.

86. *Phytosarcophaga (s. str.) destructor* (Malloch, 1929)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): **AD** (Kara and Pape 2002), **AY** (Verves et al. 2017), **MN** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015), **ME** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015).

Distribution: West Palaearctic-Afrotropical.

87. *Artamonoviella monspellensia* (Böttcher, 1913)

Distribution in Turkey: **BY** (Pekbey and Hayat 2013a), **ER** (Pekbey and Hayat 2013a), **ERZ** (Pekbey 2011; Pekbey and Hayat 2013a).

Distribution: Mediterranean.

88. *Disacachaeta cucullans* (Pandellé, 1896)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2013, “Anatolia”: Rohdendorf 1937): **ER** (Pekbey 2011; Pekbey and Hayat 2011, 2013a), **ERZ** (Pekbey 2011; Pekbey and Hayat 2011, 2013a) **IG** (Pekbey and Eroğlu 2017), **KAR** (Pekbey and Eroğlu 2017).

Distribution: West Palaearctic.

89. *Heteronychia (Boettcherella) helenae* (Trofimov, 1948)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): **ANT** (Verves and Khrokalo 2015), **AR** (Pekbey and Eroğlu 2017), **ERZ** (Pekbey 2011; Pekbey and Hayat 2011, 2013a), **IG** (Pekbey and Eroğlu 2017), **IZ** (Koçak and Kemal 2015; Whitmore 2011), **KAR** (Pekbey and Eroğlu 2017), **MG** (Verves et al. 2017).

Distribution: West-Central Palaearctic.

90. *Heteronychia (Boettcherella) mutila* (Villeneuve, 1912)

Distribution in Turkey: (Koçak 2014): **KN** (Kara and Pape 2002; Koçak and Kemal 2009, 2012, 2015).

Distribution: West Palaearctic.

91. *Heteronychia (Boettcherella) setinervis* (Rondani, 1860)

Distribution in Turkey: (Kara and Pape 2002; Koçak 2014; Koçak and Kemal 2012): **ANT** (Verves and Khrokalo 2015), **DE** (Koçak and Kemal 2015; Lehrer 1977), **ERZ** (Pekbey 2011; Pekbey and Hayat 2011), **GA** (Whitmore 2010), **HT** (Koçak and Kemal 2015; Whitmore 2010), **IG** (Pekbey and Eroğlu 2017), **KAR** (Pekbey and Eroğlu 2017), **KN** (Verves and Khrokalo 2015), **KY** (Hayat et al. 2008; Koçak and Kemal 2009, 2015), **ME** (Koçak and Kemal 2015; Verves and Khrokalo 2015; Whitmore 2010), **MG** (Verves et al. 2017), **SN** (Koçak and Kemal 2015), **TO** (Koçak and Kemal 2013, 2015; Whitmore 2010).

Distribution: West-Central Palaearctic.

92. *Heteronychia (Ctenodasypygia) minima* (Rondani, 1862)

Distribution in Turkey: (Kara and Pape 2002; Koçak 2014; Koçak and Kemal 2009, 2012): **ANT** (Verves and Khrokalo 2015), **AY** (Koçak and Kemal 2013, 2015) **GA** (Lehrer 1976b), **IZ** (Koçak and Kemal 2013, 2015, Whitmore 2011), **MG** (Verves et al. 2017), **SN** (Sevgilli et al. 2004).

Distribution: West Palaearctic.

93. *Heteronychia (Ctenodasypygia) siciliensis* (Böttcher, 1913)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012, 2013): **ANT** (Verves and Khrokalo 2015), **AY** (Lehrer 1976b), **IZ** (Koçak and Kemal 2015; Whitmore 2011), **SN** (Verves et al. 2017)

Distribution: Submediterranean.

94. *Heteronychia (Ctenodasypygia) thirionae* (Lehrer, 1976)

Distribution in Turkey: (Kara and Pape 2002; Koçak 2014; Koçak and Kemal 2009, 2012): **BS** (Koçak and Kemal 2013, 2015; Lehrer 1976a).

Distribution: Mediterranean.

95. *Heteronychia* (s. str.) *anatolica* (Whitmore, 2011)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): **AN** (Koçak and Kemal 2013, 2015; Whitmore 2011), **ERZ** (Pekbey 2011; Pekbey and Hayat 2011), **NE** (Koçak and Kemal 2013, 2015; Whitmore 2011).

Distribution: Anatolian.

96. *Heteronychia* (s. str.) *armeniaca* (Rohdendorf, 1937)

Distribution in Turkey: (Koçak and Kemal 2015): **BY** (Pekbey and Hayat 2011, 2013a), **ER** (Pekbey and Hayat 2011, 2013a), **ERZ** (Pekbey 2011; Pekbey and Hayat 2011, 2013a).

Distribution: Mid-Eastern.

97. *Heteronychia* (s. str.) *benaci* (Böttcher, 1913)

Distribution in Turkey: (Koçak 2014 – as *Sarcophaga bezziana*): **KY** (Kara and Pape 2002 – as *Sarcophaga bezziana*; Koçak and Kemal 2009, 2015 – as *Sarcophaga bezziana*), **KN** (Kara and Pape 2002 – as *Sarcophaga bezziana*; Koçak and Kemal 2009, 2013, 2015 – as *Sarcophaga bezziana*).

Distribution: West Palaearctic.

98. *Heteronychia* (s. str.) *bulgarica* (Enderlein, 1936)

Distribution in Turkey: **AR** (Pekbey and Eroğlu 2017), **BY** (Pekbey 2011; Pekbey and Hayat 2011, 2013a), **ER** (Pekbey and Hayat 2011, 2013a), **ERZ** (Pekbey 2011; Pekbey and Hayat 2011, 2013a), **SA** (Verves et al. 2017).

Distribution: West Palaearctic.

99. *Heteronychia* (s. str.) *clarahenae* Lehrer, 1999

Distribution in Turkey: **BY** (Pekbey and Hayat 2011, 2013a), **ER** (Pekbey and Hayat 2011, 2013a), **ERZ** (Pekbey 2011; Pekbey and Hayat 2011, 2013a).

Distribution: Mid-Eastern.

100. *Heteronychia* (s. str.) *consanguinea* (Rondani, 1860)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): **AD** (Hayat et al. 2008; Koçak and Kemal 2009, 2013, 2015), **ANT** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015).

Distribution: Palaearctic-Oriental.

101. *Heteronychia* (s. str.) *haemorrhoea* (Meigen, 1826)

Distribution in Turkey: (Kara and Pape 2002; Koçak 2014; Koçak and Kemal 2009, 2012, 2013, 2015).

Distribution: West Palaearctic.

102. *Heteronychia* (s. str.) *haemorrhoides* (Böttcher, 1913)

Heteronychia wahisi Lehrer, 1976b: 264.

Distribution in Turkey: (Kara and Pape 2002; Koçak 2014; Koçak and Kemal 2009, 2012): **AM** (Koçak and Kemal 2013, 2015; Whitmore 2010), **AY** (Verves et al. 2017), **ER** (Pekbey 2011; Pekbey and Hayat 2011, 2013a), **ERZ** (Pekbey 2011; Pekbey and Hayat 2011, 2013a), **HT** (Koçak and Kemal 2013, 2015; Lehrer 1976b), **MG** (Verves et al. 2017), **SA** (Verves et al. 2017), **TO** (Koçak and Kemal 2013, 2015; Whitmore 2010).

Distribution: Palaearctic.

103. *Heteronychia* (s. str.) *infantis* (Böttcher, 1913)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012 – as *Sarcophaga bez-ziana*, 2013; 2015 – as *Sarcophaga infantilis*).

Distribution: West Palaearctic.

104. *Heteronychia* (s. str.) *infixa* (Böttcher, 1913)

Distribution in Turkey: **SA** (Verves et al. 2017).

Distribution: West Palaearctic.

105. *Heteronychia* (s. str.) *kerteszi* (Villeneuve, 1912)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): **ANT** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015; Whitmore 2011), **IZ** (Koçak and Kemal 2013, 2015; Whitmore 2011), **MG** (Verves et al. 2017).

Distribution: East Mediterranean.

106. *Heteronychia* (s. str.) *lacrymans* (Villeneuve, 1912)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): **AF** (Kara and Pape 2002 – as *Sarcophaga* (*Heteronychia*) *zhelochovtzevi*; Koçak and Kemal 2009 – as *Sarcophaga* (*Heteronychia*) *zhelochovtzevi*, 2013, 2015; Whitmore 2011), **AR** (Pekbey and Eroğlu 2017), **ER** (Pekbey 2011; Pekbey and Hayat 2011, 2013a), **ERZ** (Pekbey 2011; Pekbey and Hayat 2011, 2013a), **MG** (Verves et al. 2017).

Distribution: West Palaearctic.

107. *Heteronychia* (s. str.) *pontica* (Rohdendorf, 1937)

Distribution in Turkey: **SA** (Verves et al. 2017).

Distribution: East Mediterranean.

108. *Heteronychia* (s. str.) *porrecta* (Böttcher, 1913)

Distribution in Turkey: **SA** (Verves et al. 2017).

Distribution: West Palaearctic.

109. *Heteronychia* (s. str.) *recta* (Rohdendorf, 1937)

Distribution in Turkey: **BY** (Pekbey 2011; Pekbey and Hayat 2011, 2013a), **ER** (Pekbey and Hayat 2013a), **ERZ** (Pekbey 2011; Pekbey and Hayat 2013a).

Distribution: Mid-Eastern.

110. *Heteronychia* (s. str.) *rondaniana* (Rohdendorf, 1937)

Distribution in Turkey: (Koçak 2014): **AM** (Kara and Pape 2002; Koçak and Kemal 2009, 2012, 2013, 2015), **AR** (Pekbey and Eroğlu 2017), **BY** (Pekbey 2011; Pekbey and Hayat 2011, 2013a), **ER** (Pekbey 2011; Pekbey and Hayat 2011, 2013a), **ERZ** (Pekbey 2011; Pekbey and Hayat 2011, 2013a), **KY** (Hayat et al. 2008; Koçak and Kemal 2009, 2013, 2015), **TO** (Koçak and Kemal 2013, 2013).

Distribution: West Palaearctic.

111. *Heteronychia* (s. str.) *schineri* (Bezzi, 1891)

Distribution in Turkey: (Koçak 2014): **AM** (Kara and Pape 2002; Koçak and Kemal 2009, 2012, 2013, 2015), **BY** (Pekbey 2011; Pekbey and Hayat 2011, 2013a), **SA** (Verves et al. 2017), **TO** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015).

Distribution: West Palaearctic.

112. *Heteronychia* (s. str.) *vagans* (Meigen, 1826)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): **AN** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015), **TO** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015).

Distribution: Palaearctic.

113. *Heteronychia* (*Pandelleola*) *boettcheri* (Villeneuve, 1911)

Distribution in Turkey: (Kara and Pape 2002 – as *Sarcophaga* (*Heteronychia*) *taurica*; Koçak 2014; Koçak and Kemal 2009 – as *Sarcophaga* (*Heteronychia*) *taurica*, 2012): **AM** (Koçak and Kemal 2013, 2015; Whitmore 2011), **ANT** (Verves and Khrokalo 2015), **AR** (Pekbey and Eroğlu 2017), **AY** (Verves et al. 2017), **BO** (Lehrer 1977 – as *Heteronychia* (*Pandelleola*) *gaspari*), **DU** (Koçak and Kemal 2015), **ER** (Pekbey 2011; Pekbey and Hayat 2011, 2013a), **ERZ** (Pekbey 2011; Pekbey and Hayat 2011, 2013a), **IG** (Pekbey and Eroğlu 2017), **ME** (Koçak and Kemal 2013, 2015; Whitmore 2011), **MG** (Verves et al. 2017), **SA** (Koçak and Kemal 2013, 2015; Whitmore 2011), **TO** (Koçak and Kemal 2013, 2015; Whitmore 2011).

Distribution: West Palaearctic.

114. *Heteronychia* (*Pandelleola*) *filia* (Rondani, 1860)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): **AM** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015; Whitmore 2011), **ANT** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015; Verves and Khrokalo 2015; Whitmore 2011), **AR** (Pekbey and Eroğlu 2017), **AY** (Verves et al. 2017), **BY** (Pekbey 2011; Pekbey and Hayat 2011), **ER** (Pekbey 2011; Pekbey and Hayat 2011).

2011), **ERZ** (Pekbey 2011; Pekbey and Hayat 2011), **ES** (Aslan 2006; Aslan and Çalışkan 2009; Koçak and Kemal 2009, 2013, 2015), **IG** (Pekbey and Eroğlu 2017), **KAR** (Pekbey and Eroğlu 2017), **KY** (Hayat et al. 2008; Koçak and Kemal 2009, 2015), **MG** (Verves et al. 2017), **SA** (Kara and Pape 2002; Koçak and Kemal 2009, 2015, Verves et al. 2017), **TB** (Hayat et al. 2008; Koçak and Kemal 2009, 2013, 2015), **TO** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015; Whitmore 2011).

Distribution: West Palaearctic.

115. *Heteronychia (Pandelleola) turana* (Rohdendorf, 1937)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012; Pekbey et al. 2011a): **IG** (Koçak and Kemal 2013, 2015; Pekbey and Eroğlu 2017),

Distribution: East Mediterranean-Mid-Asiatic.

116. *Karovia hirticrus* (Pandellé, 1896)

Distribution in Turkey: **SA** (Verves et al. 2017).

Distribution: West Palaearctic.

117. *Bellieriomima subulata* (Pandellé, 1896)

Distribution in Turkey: **SA** (Verves et al. 2017).

Distribution: Palaearctic.

118. *Krameromyia anaces* (Walker, 1849)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): **AM** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015), **ERZ** (Pekbey 2011), **KY** (Hayat et al. 2008; Koçak and Kemal 2009, 2013, 2015).

Distribution: West Palaearctic.

119. *Myorhina* (s. str.) *lunigera* (Böttcher, 1914)

Distribution in Turkey: **SA** (Verves et al. 2017).

Distribution: West Palaearctic.

120. *Myorhina* (s. str.) *nigriventris* (Meigen, 1826)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): **AM** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015), **AR** (Pekbey and Eroğlu 2017), **BY** (Pekbey 2011), **ER** (Pekbey 2011), **ERZ** (Pekbey 2011; Pekbey and Hayat 2010), **MG** (Verves et al. 2017), **SA** (Verves et al. 2017), **TO** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015).

Distribution: Palaearctic.

121. *Myorhina* (s. str.) *socrus* (Rondani, 1860)

Distribution in Turkey: **MG** (Verves et al. 2017).

Distribution: West Palaearctic.

122. *Myorhina* (s. str.) *soror* (Rondani, 1860)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): **AM** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015), **AR** (Pekbey and Eroğlu 2017), **AY** (Verves et al. 2017), **BY** (Pekbey 2011), **ER** (Pekbey 2011), **ERZ** (Pekbey 2011), **MG** (Verves et al. 2017), **SA** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015, Verves et al. 2017).

Distribution: West Palaearctic.

123. *Pandelleana protuberans* (Pandellé, 1896)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012, 2013, 2015, “Anatolia”: Rohdendorf 1937): **ANT** (Verves et al. 2017), **ERZ** (Pekbey 2011), **ES** (Aslan, 2006; Aslan and Çalışkan 2009).

Distribution: Palaearctic.

124. *Pandelleana tahtaliana* Lehrer, 2004

Distribution in Turkey: **KN** (Lehrer 2004), **KY** (Lehrer 2004), **MG** (Verves et al. 2017).

Distribution: Anatolian.

125. *Pseudothyrsocnema spinosa* (Villeneuve, 1912)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): **AD** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015), **AY** (Verves et al. 2017), **MG** (Verves et al. 2017).

Distribution: West Palaearctic.

126. *Sarina sexpunctata* (Fabricius, 1805)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): **BY** (Pekbey 2011), **ERZ** (Pekbey 2011), **SA** (Verves et al. 2017), **TO** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015).

Distribution: Palaearctic.

127. *Thyrsocnema incisilobata* (Pandellé, 1896)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): **AM** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015), **ERZ** (Pekbey 2011), **IG** (Pekbey and Eroğlu 2017), **KAR** (Pekbey and Eroğlu 2017), **MG** (Verves et al. 2017), **SA** (Verves et al. 2017), **TO** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015).

Distribution: Palaearctic.

128. *Bercaea africa* (Wiedemann, 1824)

Distribution in Turkey: (Kara and Pape 2002; Koçak 2014; Koçak and Kemal 2012 – both *Sarcophaga* (*Bercaea*) *africa* and *Sarcophaga* (*Bercaea*) *cruentata*): **BT** (Koçak

and Kemal 2013, 2015 – both *Sarcophaga (Bercaea) africa* and *Sarcophaga (Bercaea) cruentata*), **BY** (Pekbey 2011), **DB** (İpek et al. 2009, – as *Sarcophaga haemorrhoidalis*), **ED** (Çoban and Beyarslan 2013), **EL** (Şaki and Özer 1999a, b – as *Sarcophaga haemorrhoidalis*), **ERZ** (Pekbey 2011; Pekbey and Hayat 2010), **ES** (Aslan 2006; Aslan and Çalışkan 2009; Koçak and Kemal 2009, 2013, 2015 – both *Sarcophaga (Bercaea) africa* and *Sarcophaga (Bercaea) cruentata*), **KAR** (Hayat et al. 2008; Koçak and Kemal 2009, 2013, 2015 – both *Sarcophaga (Bercaea) africa* and *Sarcophaga (Bercaea) cruentata*), **KI** (Dik et al. 2012 – as *Sarcophaga haemorrhoidalis*), **KN** (Dik et al. 2012 – as *Sarcophaga haemorrhoidalis*), **ME** (Aslan 2006; Kara and Pape 2002), **MG** (Verves et al. 2017), **SN** (Sevgili et al. 2004), **TO** (Aslan 2006; Kara and Pape 2002), **VA** (Koçak and Kemal 2015 – both *Sarcophaga (Bercaea) africa* and *Sarcophaga (Bercaea) cruentata*; Özdal and Değer 2005 – as *Sarcophaga haemorrhoidalis*).

Distribution: Cosmopolitan.

129. *Liopygia (Engelisca) surcoufi* (Villeneuve, 1913)

Distribution in Turkey: SA (Verves et al. 2017).

Distribution: Mediterranean.

130. *Liopygia (Jantia) crassipalpis* (Macquart, 1839)

Distribution in Turkey: (Kara and Pape 2002; Koçak 2014; Koçak and Kemal 2009, 2012, 2015): **ERZ** (Pekbey 2011; Pekbey and Hayat 2010), **ES** (Aslan 2006; Aslan and Çalışkan 2009), **SN** (Sevgili et al. 2004), **TO** (Aslan 2006; Aslan and Çalışkan 2009).

Distribution: Cosmopolitan.

131. *Liopygia (Thomsonea) argyrostoma* (Robineau –Desvoidy, 1830)

Distribution in Turkey: (Kara and Pape 2002; Koçak 2014; Koçak and Kemal 2012, 2015): **BY** (Pekbey 2011), **DB** (İpek et al. 2009, 2011), **ER** (Pekbey 2011), **ERZ** (Pekbey 2011; Pekbey and Hayat, 2010), **HT** (Koçak and Kemal 2009, 2013, 2015), **IG** (Pekbey and Eroğlu 2017), **IP** (Hayat et al. 2008; Koçak and Kemal 2009, 2013, 2015), **ME** (Hayat et al. 2008), **SN** (Sevgili et al. 2004).

Distribution: Cosmopolitan.

132. *Liopygia (Varirosellea) uliginosa* (Kramer, 1908)

Distribution in Turkey: BY (Pekbey 2011), ERZ (Pekbey 2011).

Distribution: Holarctic.

133. *Liosarcophaga (Curranea) tibialis* (Macquart, 1851)

Distribution in Turkey: AN (Açıkgöz et al. 2011), AY (Verves et al. 2017), MG (Verves et al. 2017), SA (Verves et al. 2017), SN (Sevgili et al. 2004).

Distribution: Palaearctic-Afrotropical-Oriental-Australasian/Oceanian.

134. *Liosarcophaga* (s. str.) *bartaki* Verves, Radchenko & Khrokalo, 2017

Distribution in Turkey: AY (Verves et al. 2017), MG (Verves et al. 2017), SA (Verves et al. 2017).

Distribution: Anatolian.

135. *Liosarcophaga* (s. str.) *dux* (Thomson, 1869)

Distribution in Turkey: AN (Açıkgöz et al. 2011), SN (Sevgili et al. 2004).

Distribution: Palaearctic-Afrotropical-Oriental-Australasian/Oceanian.

136. *Liosarcophaga* (s. str.) *emdeni* (Rohdendorf, 1969)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): AM (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015), AR (Pekbey and Eroğlu 2017), ER (Pekbey 2011), ERZ (Pekbey 2011), SA (Verves et al. 2017).

Distribution: Palaearctic.

137. *Liosarcophaga* (s. str.) *fedtschenkoi* (Rohdendorf, 1969)

Distribution in Turkey: BY (Pekbey 2011), ERZ (Pekbey 2011).

Distribution: Asian.

138. *Liosarcophaga* (s. str.) *jacobsoni* (Rohdendorf, 1937)

Distribution in Turkey: ERZ (Pekbey 2011; Pekbey and Hayat 2010), ES (Aslan 2006; Aslan and Çalışkan 2009), MG (Verves et al. 2017).

Distribution: Palaearctic.

139. *Liosarcophaga* (s. str.) *portschinskyi* (Rohdendorf, 1937)

Distribution in Turkey: (Kara and Pape 2002; Koçak 2014; Koçak and Kemal 2009, 2012, 2015): AM (Koçak and Kemal 2013), ERZ (Pekbey 2011), ES (Aslan, 2006; Aslan and Çalışkan 2009), SA (Verves et al. 2017).

Distribution: Palaearctic-Oriental.

140. *Liosarcophaga* (s. str.) *teretirostris* (Pandellé, 1896)

Distribution in Turkey: BY (Pekbey 2011), ERZ (Pekbey 2011).

Distribution: West Palaearctic.

141. *Liosarcophaga* (s. str.) *tuberosa* (Pandellé, 1896)

Distribution in Turkey: ER (Pekbey 2011), ERZ (Pekbey 2011), SN (Sevgili et al. 2004).

Distribution: Palaearctic-Oriental.

142. *Liosarcophaga* (*Pandelleisca*) *similis* (Meade, 1876)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): AY (Verves et al. 2017), MG (Verves et al. 2017), TB (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015).

Distribution: Palaearctic-Oriental.

143. *Parasarcophaga* (s. str.) *albiceps* (Meigen, 1826)

Distribution in Turkey: (Kara and Pape 2002; Koçak 2014; Koçak and Kemal 2009, 2012, 2015): **AR** (Pekbey and Eroğlu 2017), **ERZ** (Pekbey 2011), **SA** (Verves et al. 2017).

Distribution: Palaearctic-Oriental-Australasian/Oceanian.

144. *Parasarcophaga* (s. str.) *hirtipes* (Wiedemann, 1830)

Distribution in Turkey: (Kara and Pape 2002; Koçak 2014; Koçak and Kemal 2009, 2012, 2015): **SN** (Sevgili et al. 2004).

Distribution: Palaearctic-Afrotropical-Oriental-Australasian/Oceanian.

145. *Robineauella* (s. str.) *caerulescens* (Zetterstedt, 1838)

Distribution in Turkey: **ER** (Pekbey 2011).

Distribution: Holarctic-Oriental.

146. *Rosellea aratrix* (Pandellé, 1896)

Distribution in Turkey: (Koçak 2014; Koçak and Kemal 2012): **BU** (Kara and Pape 2002; Koçak and Kemal 2009, 2013, 2015), **SA** (Verves et al. 2017).

Distribution: Holarctic-Oriental.

147. *Rosellea beckiana* Lehrer, 1996

Distribution in Turkey: **AY** (Verves et al. 2017), **MG** (Verves et al. 2017).

Distribution: East Mediterranean.

148. *Sarcophaga bergi* Rohdendorf, 1937

Distribution in Turkey: (Kara and Pape 2002; Koçak 2014; Koçak and Kemal 2009; 2012): **ER** (Pekbey 2011, 2017), **ERZ** (Pekbey 2011, 2017), **ES** (Aslan and Çalışkan 2009; Pekbey 2017), **KAR** (Koçak and Kemal 2013, 2015; Rohdendorf 1937; Pekbey 2017; Pekbey and Eroğlu 2017).

Distribution: East Mediterranean.

149. *Sarcophaga carnaria* (Linnaeus, 1758)

Sarcophaga schulzi: Verves 1986: 188.

Distribution in Turkey: (Koçak, 2014; Koçak and Kemal 2015): **DB** (İpek et al. 2009), **SN** (Sevgili et al. 2004).

Distribution: Palaearctic.

150. *Sarcophaga croatica* Baranov, 1941

Distribution in Turkey: **ES** (Aslan and Çalışkan 2009; Pekbey 2017).

Distribution: Mediterranean.

151. *Sarcophaga lehmanni* Müller, 1922

Distribution in Turkey: (Kara and Pape 2002; Koçak 2014; Koçak and Kemal 2012 – as *Sarcophaga* (s. str.) *lasiostyla*): **AM** (Aslan 2006), **AR** (Pekbey and Eroğlu 2017), **AY** (Verves et al. 2017), **BY** (Pekbey 2011, 2017), **ER** (Pekbey 2011, 2017), **ERZ** (Pekbey 2011, 2017; Pekbey and Hayat, 2010), **ES** (Aslan, 2006; Aslan and Çalýpkan 2009; Koçak and Kemal 2009 – as *Sarcophaga* (s. str.) *lasiostyla*, 2013, 2015 – as *Sarcophaga* (s. str.) *lasiostyla*; Pekbey 2017), **HA** (Verves et al. 2017), **IG** (Hayat et al. 2008; Koçak and Kemal 2009 – as *Sarcophaga* (s. str.) *lasiostyla*, 2013, 2015 – as *Sarcophaga* (s. str.) *lasiostyla*; Pekbey 2017; Pekbey and Eroğlu 2017), **IZ** (Civelek and Tezcan 2005; Hayat et al. 2005; Koçak and Kemal 2009 – as *Sarcophaga* (s. str.) *lasiostyla*, 2013, 2015 – as *Sarcophaga* (s. str.) *lasiostyla*; Pekbey 2017), **KAR** (Hayat et al. 2008; Koçak and Kemal 2009, 2013, 2015 – as *Sarcophaga* (s. str.) *lasiostyla*; Pekbey 2017; Pekbey and Eroğlu 2017), **KY** (Hayat et al. 2008; Koçak and Kemal 2009 – as *Sarcophaga* (s. str.) *lasiostyla*, 2013, 2015 – as *Sarcophaga* (s. str.) *lasiostyla*; Pekbey 2017), **MLA** (Koçak and Kemal 2013), **MN** (Civelek and Tezcan 2005; Koçak and Kemal 2009 – as *Sarcophaga* (s. str.) *lasiostyla*, 2013, 2015 – as *Sarcophaga* (s. str.) *lasiostyla*), **MG** (Verves et al. 2017), **SA** (Verves et al. 2017).
Distribution: Palaearctic.

152. *Sarcophaga trabzonensis* Pekbey, Hayat, Richet & Blackith, 2011

Distribution in Turkey: **AR** (Pekbey, 2017; Pekbey et al. 2011b), **KAR** (Pekbey, 2017; Pekbey et al. 2011b), **TB** (Pekbey, 2017; Pekbey et al. 2011b).
Distribution: Anatolian.

153. *Sarcophaga variegata* (Scopoli, 1763)

Distribution in Turkey: (Kara and Pape 2002; Koçak 2014; Koçak and Kemal 2009, 2012 – as *Sarcophaga carnaria*; 2013 - as *Sarcophaga variegata*; 2015 - as *Sarcophaga carnaria*): **DB** (İpek et al. 2009), **EL** (Şaki and Özer 1999a, b), **SN** (Sevgili et al. 2004).
Distribution: Palaearctic.

Discussion

Altogether 153 species of Sarcophagidae are listed from Turkey. The degree of study of Turkish sarcophagids is not high: we suppose that approximately 75 – 80 % of species is currently known from the country. The number of species known for each Turkish province is very different (Fig. 1), depending chiefly on areas of research of the most active researchers: 62 species are recorded from Erzurum, 54 from Muğla, 32 from Erzincan, 31 from Samsun, 27 from Bayburt, 25 from Tokat, 24 from Aydın, 23 from Antalya, 20 from Şanlıurfa, 19 from Artvin, 18 from and Kars, 16 from Amasya, and Iğdır, 14 from Eskişehir, and Kayseri, 12 from Konya, 7 from Ankara, İzmir, and Mersin, 5 from Adana, Burdur, Diyarbakır and Gaziantep, 4 from Hatay, 5 from Bursa, Elazığ, Isparta, Kırıkkale,

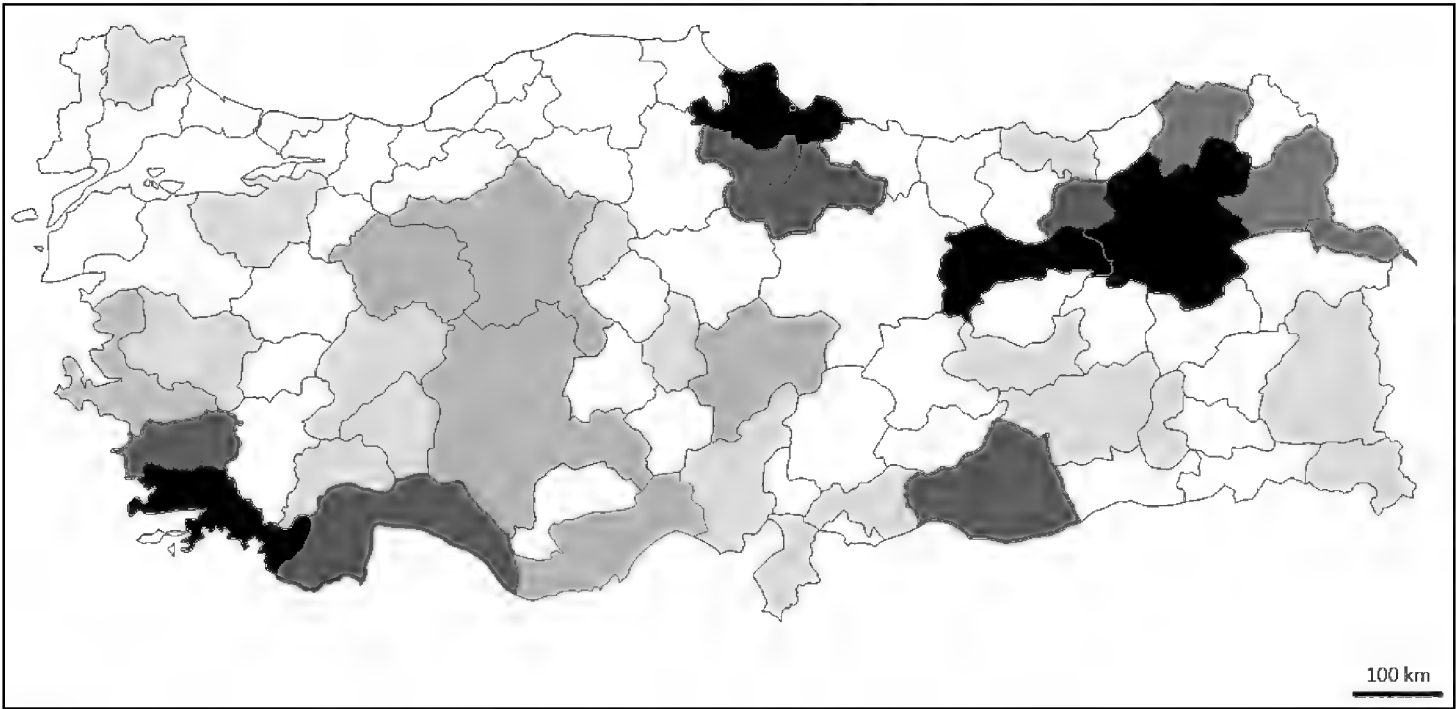


Figure 1. Level of flesh fly knowledge in individual Turkish provinces. Darker colour depicts higher number of species known (scale: 2–6, 7–14, 15–29, more than 30 species). Only provinces with more than two species are shaded.

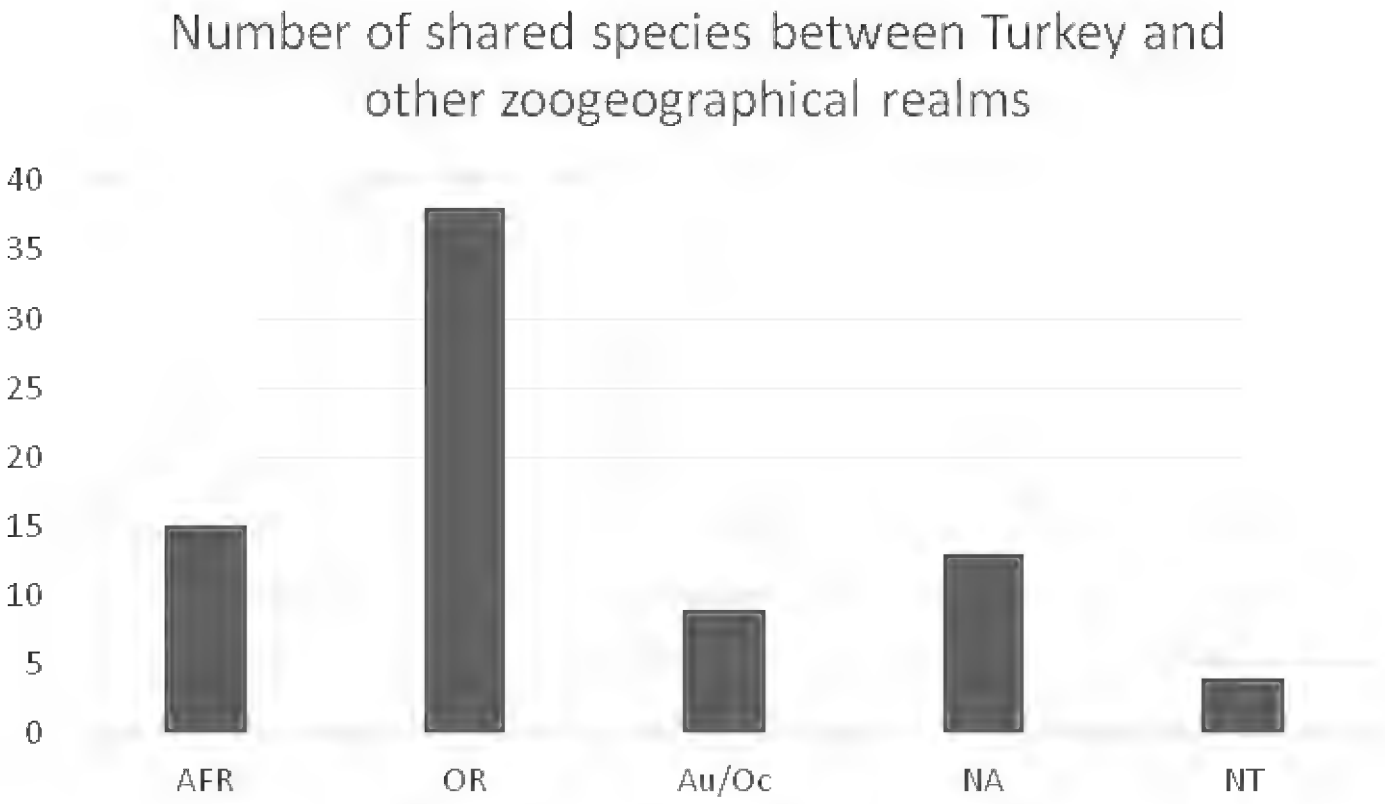


Figure 2. Numbers of shared species between Turkey and other zoogeographical realms.

Trabzon, and Van, 2 from Afyonkarahisar, Batman, Hakkâri, Manisa, and Nevşehir, 1 from Adiyaman, Ağrı, Bolu, Çanakkale, Denizli, Düzce, Edirne, Istanbul, Karaman, Malatya, and Mardin. No sarcophagids are known from the remaining provinces.

Many scientists think that Anatolia was an important Pleistocene glacial refugium. This fact, together with heterogeneous topography and geographical position

of Anatolia at junction of three biodiversity hotspots: the Caucasus, Irano-Anatolian and Mediterranean (Gür 2016), resulted in very high animal diversity. This, alongside poor level of faunistic research, may explain recent increase in the number of known sarcophagids from 82 (last catalogue: Kara and Pape 2002) to 153 (present paper). Nevertheless, zoogeographical analysis of Turkish sarcophagid fauna is difficult because many species changed its range owing to human activities.

Altogether 24 species (ca. 16 %) are broadly distributed, known from at least three basic geographic realms. Out of them, three species are virtually cosmopolitan (*Bercaea africa*, *Liopygia argyrostoma*, and *L. crassipalpis*). At least several species of this group were artificially disseminated by humans.

Moreover, 20 species (ca. 13 %) are widely distributed also in other zoogeographical regions: Oriental (14 species), Afrotropical (4 species), and Nearctic (2 species).

The numbers of shared species between Turkey and other zoogeographical regions is depicted in Fig. 2.

Most species occur also in the Oriental (38 species), Afrotropical (15 species), Nearctic (13 species), Australian/Oceanian (9 species) and Neotropical (4 species) regions. Not surprisingly, most species known currently from Turkey are Palearctic in distribution (43 species) or known from at least the western (30 species) or west – central parts (4 species), representing more than 50% of species. The dominance of Palearctic elements in the Anatolian fauna has been well established (see e.g., Kosswig 1955).

The remaining species have several types of distribution covering the whole of the Mediterranean subregion (6 species) or only its eastern parts (8 species), while additional species penetrate from the East Mediterranean to eastern countries of Middle East (4 species) or to the warmest parts of central Europe (2 species classified as submediterranean) or to central Asia (5 species). Altogether these species compose 16.33 % of total.

Faunistically significant are species up to now known only from Turkey, classified in the list above as Anatolian (*Apodacra radchenkoi*, *Agriella lindneri*, *Blaesoxipha calliste*, *Heteronychia anatolica*, *Liosarcophaga bartaki*, *Pandelleana tahtaliana*, *Sarcophaga trabzonensis* - 7 species, 4.58 %).

Acknowledgements

This paper was supported by S grant of MSMT (Ministry of Education, Sports and Youth, Czech Republic). We thank Prof. A. Koçak (Centre for Entomological Studies, Ankara) for sending necessary publications about Turkish flies.

References

- Abasa RO (1970) Reproductive biology of *Sarcophaga tibialis* (Diptera: Sarcophagidae). I. Life history with notes on prepupation mortality and pupation habits. Annals of the Entomological Society of America 63: 466–469. <https://doi.org/10.1093/aesa/63.2.466>

- Abdul-Rassoul MS, Augul RSH, Al-Saffar HH (2004) Seasonal abundance of adult fly species on the exposed carcasses in Baghdad City. *Ibn Al-Haitham Journal for Pure and Applied Sciences* 22: 1–10.
- Açıkgöz HN, Açıkgöz A, Isbasar T (2011) Predator behavior of *Chrysomya albiceps* (Fabricius) (Diptera: Calliphoridae) on human corpses. *Turkish Journal of Parasitology* 35: 105–109. <https://doi.org/10.5152/tpd.2011.26>
- Akduman D, Arslan MO, Gul S (2010) A case of otomyiasis in a child with chronic otitis media. *International Journal of Pediatric Otorhinolaryngology Extra* 6: 116–118. <https://doi.org/10.1016/j.pedex.2010.05.001>
- Aksoy HA, Bahadıroğlu C (2012) Evaluation of some alternative control methods against Mediterranean Corn Borer, *Sesamia nonagrioides* Lefebvre (Lepidoptera: Noctuidae) and European Corn Borer, *Ostrinia nubilalis* Hübner (Lepidoptera: Crambidae). *BEU Journal of Science* 1: 127–136. [In Turkish with English summary]
- Aldrich JM (1916) *Sarcophaga* and allies in North America. Entomological Society of America, Thomas Say Foundation. La Fayette, Indiana, 302 pp. <https://doi.org/10.5962/bhl.title.32298>
- Al-Ghzawi AA, Zaitoun ST, Shannag HK (2009) Incidence and geographical distribution of honeybee (*Apis mellifera* L.) pests in Jordan. *Annales de la Société Entomologique de France* (n. s.) 45: 305–308.
- Al-Mesbah H, Moffatt C, El-Azazy OME, Majeed QAH (2012) The decomposition of rabbit carcasses and associated necrophagous Diptera in Kuwait. *Forensic Science International* 217: 27–31. <https://doi.org/10.1016/j.forsciint.2011.09.021>
- Al-Misned FAM, Amoudi MA, Abou-Fannan SSM (2001) First record of *Sarcophaga* (*Liosarcophaga*) *dux* Thomson, 1868 (Diptera: Sarcophagidae) from Saudi Arabia. *Pakistan Journal of Zoology* 33: 313–315.
- Amoudi MA (1993) New records of some of sarcophagid flies with distribution of all known flesh flies (Diptera: Sarcophagidae) of Saudi Arabia. *Journal of Egyptian Society of Parasitology* 23: 297–304.
- Arnaud PH Jr (1975) *Sarcophaga tibialis* Macquart intercepted in California (Diptera: Sarcophagidae). *Pan-Pacific Entomologist* 52: 89–90.
- Arthur AP, Coppel HS (1953) Studies on dipterous parasites of the spruce budworm, *Choristoneura fumiferana* (Clem.) (Lepidoptera: Tortricidae) I. *Sarcophaga aldrichi* Park. (Diptera: Sarcophagidae). *Canadian Journal of Zoology* 31: 374–391. <https://doi.org/10.1139/z53-029>
- Aslan A (2006) Studies related with Sarcophagidae (Diptera) fauna in Eskiflehir. Master of Science Thesis, Osman Gazi University, Department of Biology, 66 pp.
- Aslan A, Çalışkan H (2009) Fauna of Eskişehir Sarcophagidae (Insecta, Diptera), and new records for Turkey. *Sakarya Üniversitesi Fen Edebiyat Dergisi* 11: 15–27.
- Atmaca S, Cengel S, Gumussoy M, Kutlar G, Acici M, Hokelek M (2009) Counting larvae in a farmer's ear: 23. *International Advanced Otology* 5: 118–121.
- Aydenizöz M, Dik B (2008) A case of gingival myiasis in a lamb caused by the *Wohlfahrtia magnifica* (Diptera: Sarcophagidae). *Turkish Journal of Parasitology* 32: 79–81
- Bänzinger H, Pape T (2004) Flowers, faeces and cadavers: natural feeding and laying habits of flesh flies in Thailand (Diptera: Sarcophagidae, *Sarcophaga* spp.). *Journal of Natural History* 38: 1677–1694. <https://doi.org/10.1080/0022293031000156303>

- Baranov N (1929) Beitrag zur Kenntnis der Gattung *Sarcophaga* (Mg.) Boettcher (Dipt., Tach.). Neue Beiträge zur Systematische Insektenkunde 4: 142–153.
- Baranov N (1938) Raupenfliegen (Tachinidae s. l.) welche auf der Adria –Insel Pag bei trinken von Meerwasser gefangen wurden. Encyclopédie Entomologique, Ser. B II. Diptera 9: 103–107.
- Baranov N (1942) Sarcophagen in Unabhängigen Staate Kroatien. Veterinarski Arhiv, 12, 497–659.
- Barnett IK, Emms C (1998) An annotated checklist of the Chagos Archipelago terrestrial fauna (omitting birds) recorded during the 1996 “Friends of the Chagos” expedition. Phelsuma 6: 41–52.
- Bayındır T, Miman Ö, Miman MC, Atambay M, Şaki CE (2010) Bilateral aural myiasis (*Wohlfahrtia magnifica*): A case with chronic suppurative otitis media. Turkish Journal of Parasitology 34: 65–67 (in Turkish with English summary).
- Beaver RA (1986) Some Diptera and their parasitoids bred from dead snails in Zambia. Entomologist’s Monthly Magazine 122: 195–199.
- Bezzi M (1913) Ditteri raccolti nella Somalia italiana meridionale. Redia 10: 219–223.
- Bezzi M (1914) Contributo allo studio della fauna Libica. Materiali raccolti nelle zone di Misurata e Homs (1912–13) dal Dott. Alfredo Andreini, Capitano Medico. Ditteri. Annali del Museo civico di Storia Naturale Giacomo Doria di Genova, Ser. 3, 6: 165–181.
- Bezzi M (1915) Ditteri raccolti nella Somalia italiana meridionale. Redia 10: 219–233.
- Bezzi M (1921) Ditteri di cirenaica raccolti dal Prof. Alessandro Ghigi durante l’escursione organizzata dal touring club italiano nel mese d’aprile 1920. Atti della Società Italiana di Scienze Naturali e del Museo Civico di Storia Naturale in Milano 60: 432–443.
- Blackith RE, Blackith RM, Pape T (1997) Taxonomy and systematics of *Helicophagella* Enderlein, 1928 (Diptera: Sarcophagidae) with the description of a new species and a revised catalogue. Studia Dipterologica 4: 383–434.
- Borah N, Hazarika M, Rehman A, Patgiri P (2015) Diversity of Dipteran insects in Jorhat district of Assam, North East India. Insect Environment 20: 109–110.
- Boscarelli A, Sandri GBL (2016) Periungual myiasis caused by *Wohlfahrtia magnifica* mimicking an ingrown toenail. Translational Pediatrics 5: 95–96. <https://doi.org/10.21037/tp.2016.03.01>
- Brauer F, Bergenstamm JE von (1891) Die Zweiflügler des Kaiserlichen Museums zu Wien. V. Vorarbeiten zu einer Monographie der Muscaria Schizometopa (exclusive Anthomyiidae). Pars II. Denkschriften der Kaiserlichen Akademie der Wissenschaften. Mathematisch – Naturwissenschaftliche Classe 58: 39–446.
- Brèthes J (1908) Catálogo de los dípteros de las Repúblicas de Plata. Anales del Museo Nacional de Buenos Aires, Ser. 3 (1907) 14: 277–305.
- Brimley CS (1938) The insects of North Carolina. Being a list of the insects of North Carolina and their close relatives. North Carolina Department of Agriculture, Division of Entomology; Raleigh, North Carolina, 560 pp.
- Brink SL (2009) Key diagnostic characteristics of the developmental stages of forensically important Calliphoridae and Sarcophagidae in Central South Africa. Ph. D., University of the Free State; Bloemfontein, South Africa, 257 pp.

- Britton WE (1921) Check –list of the insects of Connecticut. Bulletin of the State Geological and Natural History Survey of Connecticut (1920)31: 192–196.
- Britvec B (2000) The Diptera important for the agriculture and forestry of Croatia in light of the faunistic researches. Agronomski Glasnik 62: 323–343.
- Bruce WG, Knipling EF (1936) Seasonal appearance and relative abundance of flies attracted to baited traps. Iowa State College Journal of Science 10: 361–366.
- Bryan EH Jr (1926) Additional notes on the insects of Mauna Kea and Mauna Loa. Proceedings of the Hawaiian Entomological Society 6: 239–341.
- Bryan EH Jr (1934) A review of the Hawaiian Diptera, with descriptions of new species. Proceedings of the Hawaiian Entomological Society 8: 399–468.
- Buckell ER, Spencer GJ (1945) A preliminary list of the flesh flies of British Columbia (Diptera: Sarcophagidae). Proceedings of the Entomological Society of British Columbia 42: 6 (in Turkish with English summary).
- Buenaventura E, Pape T (2017) Phylogeny, evolution and male terminalia functionality of Sarcophaginae (Diptera: Sarcophagidae). Zoological Journal of the Linnean Society. <https://doi.org/10.1093/zoolinnean/zlx070>
- Büyükkurt MG, Miloğlu Ö, Nalbantoğlu S, Uslu H, Yolcu Ü, Aktaş O (2008) Oral myiasis in a child due to *Wohlfahrtia magnifica*: original image. Türkiye Klinikleri Journal of Medical Sciences 28: 782–785. [In Turkish with English summary]
- Byers GW (1962) Observations at nests of *Cerceris halone* Banks (Hymenoptera: Sphecidae). Journal of the Kansas Entomological Society 35: 317–321.
- Çoban E, Beyarslan A (2013) Identification of dipteran species of forensic entomology importance in summer season in Edirne. Bitlis Eren University Journal of Science & Technology 3: 18–21. <https://doi.org/10.17678/beuscitech.47135>
- Calero MC (1948) Cutaneous myiasis in Panama. Journal of Parasitology 34: 343–344. <https://doi.org/10.2307/3273697>
- Calvert F (1882) *Sarcophaga lineata* destructive to locusts in the Dardanelles. The American Naturalist 16: 410–411.
- Carles–Tolrá M, Rosado J (2009) Algunos Dípteros de Portugal capturados mediante trampas de emergencia (Insecta, Diptera). Boletín de la Sociedad Entomológica Aragonesa 44: 343–348.
- Çevik C, Kaya ÖA, Akbay E, Özkan M, Kahraman A, Uçak M (2014) An unusual *Wohlfahrtia magnifica* myiasis case localized in cutaneous and subcutaneous tissues in a patient with head –neck cancer. Turkish Journal of Parasitology 38: 135–137. <https://doi.org/10.5152/tpd.2014.3353>
- Chaiwong T, Sukontason K, Sukontason KL (2009) Two new species of *Sarcophaga* s. lat. from Thailand with a key to species (Diptera: Sarcophagidae). Journal of Medical Entomology 46: 986–993. <https://doi.org/10.1603/033.046.0503>
- Çiftçioglu N, Altıntaş K, Haberal M (1997) A case of human orotracheal myiasis caused by *Wohlfahrtia magnifica*. Parasitology Research 83: 34–36.
- Civelek HS, Tezcan S (2005) Some new records for Diptera fauna of Turkey and additional notes on the dipterous fauna of cherry orchards. Turkish Journal of Entomology 29: 11–16.

- Clausen CP (1978) Introduced parasites and predators of arthropod pests and weeds. Agricultural Handbook, U.S. Department of Agriculture, No 480, 1–545.
- Cockerell TD A (1905) The Diptera of Kansas and New Mexico. Transactions of the Kansas Academy of Sciences 19: 250–251. <https://doi.org/10.2307/3624211>
- Coe RL (1960) A further collection of Diptera from Yugoslavia, with localities and notes. Bulletin du Museum d'Histoire Naturelle de Belgrade (B)16: 43–67.
- Coe RL (1962) A further collection of Diptera from Yugoslavia, with localities and notes. Bulletin du Museum d' Histoire Naturelle de Belgrade (B)18: 95–144.
- Criddle N (1927) The entomological record, 1926. Annual Report of the Entomological Society of Ontario 57: 47–62.
- Curran CH (1929) Diptera collected by Prof. and Mrs Cockerell in New Caledonia and Fiji Islands. American Museum Novitates 375: 1–15.
- Demyanova EI, Kvitkina AK, Lykov VA (2007) The feature of pollination of *Heracleum sibiricum* L. and *Seseli libanotis* (L.) Koch (Apiaceae) at conditions of West Ural. Bulletin of Perm University, Serie Biology 5: 6–14. [in Russian with English subtitle]
- Deng Y-h, Chen Z-Z, Fan Z-D (2006) Redescription of *Wohlfahrtia nuba* (Wiedemann) intercepted from an airplane entered to China (Diptera: Sarcophagidae). Acta Parasitologica et Medica Entomologica Sinica 13: 113–115. [In Chinese with English summary]
- Davis CJ (1971) Recent introductions for biological control in Hawaii XVI. Proceedings of Hawaiian Entomological Society 21: 59–62.
- Diaz LA, Kaufman PE (2011) A flesh fly *Sarcophaga crassipalpis* Macquart (Insecta: Diptera: Sarcophagidae). Entomology and Nematology Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Document EENY 503, 6 pp.
- Dik B, Uslu U, Işık N (2012) Myiasis in animals and humanbeings in Turkey. Journal of the Faculty of Veterinary Medicine, Kafkas University 18: 37–42. [In Turkish with English summary]
- Dinçer Ş (1997) İnsan ve hayvanlarda myiasis. In: Özcel MA, Daldal N (Eds) Parazitoloji de arthropod hastalıkları ve vektörler. Turkish Journal of Parasitology 13: 169–233. [In Turkish]
- Dinçer Ş, Aydenizöz M, Acar A, Nalbantoğlu S (2001) Otomyiasis of humans in Turkey caused by *Wohlfahrtia magnifica* (Diptera: Sarcophagidae). Türkish Journal of Parasitology 25: 283–285. [In Turkish with English summary]
- Disney RHL (1973) A note on some filth –inhabiting flies in Cameroon. Entomologist's Monthly Magazine 108: 212–213.
- Ebejer MJ (2000) Description of third instar larva and puparium of *Blaesoxipha calliste* Pape (Diptera: Sarcophagidae). Studia Dipterologica 7: 121–124.
- El-Hawagry MS, Abdel-Dayem MS, Elgharbawy AA, Al Dhafer HM (2016) A preliminary account of the fly fauna in Jabal Shada al-A'la Nature Reserve, Saudi Arabia, with new records and biogeographical remarks (Diptera, Insecta). ZooKeys 636: 107–139. <https://doi.org/10.3897/zookeys.636.9905>
- Feng S, Ji H, He Y, Du J, Liu N, Zhu B (2012) The directory of Diptera flies in Chongqing city. Chinese Journal of Hygienic Insecticides & Equipments 18: 143–147.
- Fetene T, Worku N (2009) Public health importance of non –biting cyclorrhaphan flies. Transactions of the Royal Society of Tropical Medicine and Hygiene 103: 187–191. <https://doi.org/10.1016/j.trstmh.2008.08.010>

- Fox BG, Shimakawa E (2005) Mitochondrial DNA –based identification of forensically important Sarcophagidae and Calliphoridae (Diptera) in Hawaii. *Proceedings of the American Academy of Forensic Sciences* 11: 37–38.
- Frost CL, Braig HR, Amendt J, Perotti MA (2010) Chapter 6. Indoor arthropods of forensic importance: insects associated with indoor decomposition and mites as indoor markers, pp. 93–108. In: Amendt J, Campobasso CP, Goff ML, Grassberger M (Eds) *Current Concepts in Forensic Entomology*. Springer Science+Business Media B. V., Dordrech, Heidelberg, London, New York, 376 pp.
- Gatt P, Ebejer MJ (2014) A review and checklist of the flesh-flies (Diptera, Sarcophagidae) of Malta. *Dipterists Digest* 21: 103–122.
- Goff ML (1991) Comparison of insect species associated with decomposing remains recovered inside dwellings and outdoors on the island of Oahu, Hawaii. *Journal of Forensic Sciences* 36: 748–753. <https://doi.org/10.1520/JFS13085J>
- Goff ML, Odom CB (1987) Forensic entomology in the Hawaiian Islands: Three case studies. *American Journal of the Forensic Medicine and Pathology* 8: 45–50. <https://doi.org/10.1097/00000433-198703000-00011>
- Gözüaık C, Mart C (2009) Determination of natural parasitization rates of some pests of Lepidoptera larvae in corn (*Zea mays* L.) in the Southeastern Anatolia Region. *Bitki Koruma Bülteni* 49: 107–116. [In Turkish with English summary]
- Grabovac S, Petri D (2005) The fly fauna (Diptera: Cyclorrapha) on animal farms. *Acta Entomologica Serbica* (2003) 8: 63–72.
- Grigorian AYu (1988) Parasites of main scale –winged pests of apple tree and pear in Lori – Pambak zone of the Armenian SSR. *Armenian Biological Journal* 41: 337–340 [In Russian with English subtitles]
- Gümüşsoy I, alayan F, Güven E, Miloğlu Ö (2015) A rare case of palatinal oral myiasis caused by *Wohlfahrtia magnifica*. *Journal of Dental Faculty of Ataturk University Suppl.* 11: 1–3. <https://doi.org/10.17567/dfd.60102>
- Gür H (2016) The Anatolian diagonal revisited: Testing the ecological basis of a biogeographic boundary. *Zoology in the Middle East* 62: 189–199. <https://doi.org/10.1080/09397140.2016.1226544>
- Hardy DE (1980) Diptera: Cyclorrapha IV, Series Schizophora, Section Calyptratae. *Insects of Hawaii* 14: i–vii, 1–491.
- Hayat R, Richet R, Bayrak N, Pekbey G (2008) Contributions to the knowledge of flesh flies (Diptera: Sarcophagidae) from Turkey, with a new record. *Turkish Journal of Zoology* 32: 385–390.
- Ho C (1938) On some species of *Sarcophaga* from Java and its neighboring islands. *Annals of the Tropical Medicine and Parasitology* 32: 115–127. <https://doi.org/10.1080/00034983.1938.11685017>
- Hutson AM (1981) A preliminary list of insects of Diego Garcia Atoll, Chagos Archipelago. *Atoll Research Bulletin* 243: 1–29. <https://doi.org/10.5479/si.00775630.243.1>
- İpek DNS, Şaki CE (2010) External myiasis on cows, sheep and goats in Diyarbakır Province. *Journal of the Faculty of Veterinary Medicine, Dicle University* 1: 1–7.
- İpek DNS, Şaki CE, Özer E (2009) Seasonal distributions of external myiasis flies determined in Diyarbakır province. *Journal of the Faculty of Veterinary Medicine, Kafkas University* 17: 469–475.

- James MT (1947) The flies that cause myiasis in man. Miscellaneous Publications of the United States Department of Agriculture 631: 1–175. <https://doi.org/10.5962/bhl.title.65688>
- Johnson CW (1912) Dipterological notes. Psyche 19: 102–104. <https://doi.org/10.1155/19-12/53138>
- Kano R, Thinh TH, Kurahashi H (1999) The flesh –flies (Diptera, Sarcophagidae) from the northern part of Vietnam. Bulletin of National Scientific Museum, Series A 25: 129–141.
- Kara K, Arslan ÖM (2011) Myiasis in animals and humans in northeastern Anatolia. Atatürk Üniversitesi Veteriner Bilimleri Dergisi 6: 245–250 [In Turkish with English summary]
- Kara K, Pape T (2002) Check list of Turkish Sarcophagidae (Insecta, Diptera) with new records. Deutsche Entomologische Zeitschrift 49: 291–295. <https://doi.org/10.1002/mmnd.20020490213>
- Karaman E, Samasti M, Saritzali G, Ozdemir S, Halil MC, Isildak H (2009) Otomyiasis by *Wohlfahrtia magnifica*. Journal of Craniofacial Surgery 20: 2123–2124. <https://doi.org/10.1097/SCS.0b013e3181bec66e>
- Kehlmaier C (1998) Data –basis for a check –list of all known Diptera –species from the Azores Archipelago (Insecta: Diptera). Boletim do Museu Municipal do Funchal 50: 71–90.
- Kemal M, Koçak AÖ (2015) Preliminary list of the Pterygota of Vargözü – Yeşiltaş area (Yüksekova, Hakkari Province, SE Turkey). CESA News 103: 1–26.
- Kemal M, Koçak AÖ (2017) Observations and faunistic notes on some Diptera of Bahçesaray district (Van Province, East Turkey). CESA News 144: 1–14.
- Khan JMA, Khan RJ (1984) Human myiasis in Pakistan (April 1980 – July 1983). Asian Medical Journal 27: 44–50.
- Khan LA, Zambare SP, Fahd MA (2016) First record of sarcophagid dipteran *Parasarcophaga* (*Thomsonea*) *argyrostoma* from Maharashtra state of India. Life Sciences Leaflets 77: 52–64.
- Kılınç ÖO, Oğuz B, Sona A, Biçek K, Özdal N, Değer MS (2013) Traumatic myiasis associated with *Wohlfahrtia magnifica* (Schiner, 1862; Diptera: Sarcophagidae) larvae in a dog. Animal Health, Production and Hygiene 2: 209–211 [In Turkish with English summary]
- Koçak AÖ (2014) List of the 23773 pterygot species in Turkey based upon the info –system of the CESA. Priamus, Suppl. 32: 1–877.
- Koçak AÖ, Kemal M (2009) List of the dipteran genera and species recorded in Turkey based upon the info –system of the Cesa (Report of the temporary results of the entomofauna of Turkey – 7). CESA News 51: 3–106.
- Koçak AÖ, Kemal M (2012) List of the hitherto recorded pterygot taxa of Turkey (Insecta) (temporary report of the Entomofauna Projekt of Turkey – 10). CESA Memoirs 6: 1–1649.
- Koçak AÖ, Kemal M (2013) Diptera of Turkey. Priamus, Suppl. 28: 1–411.
- Koçak AÖ, Kemal M (2015) Initial results of the entomofauna of SW Asia, based upon the info–system of the Cesa (excl. Lepidoptera). Priamus 35: 1–1186.
- Kosswig C (1955) Zoogeography of the Near East. Systematic Biology 4: 49–73. <https://doi.org/10.2307/sysbio/4.2.49>
- Kökçam I, Şaki CE (2005) A case of cutaneous myiasis caused by *Wohlfahrtia magnifica*. Journal of Dermatology 32: 459–463. <https://doi.org/10.1111/j.1346-8138.2005.tb00780.x>

- Köse M, Bozkurt MF, Kartal K, Yaprakçi V (2013) Wound myiasis by *Wohlfahrtia magnifica* in a dog. *Bornova Veteriner Bilimleri Dergisi* 35(49): 31–34.
- Krishnamurti B, Usman S (1955) Some insect parasites of economic importance noted in Mysore State. *Indian Journal of Entomology* 16: 327–344.
- Krüger RF, Ribeiro PB, Costa PRP (2003) Behaviour of *Sarcophaga (Liopygia) crassipalpis* (Macquart) (Diptera, Sarcophagidae). *Entomologia y Vectores* 10: 85–98.
- Kurahashi H, Chaiwong T (2013) Keys to the flesh flies of Thailand, with description of a new species of *Robineauella* Enderlein (Diptera: Sarcophagidae). *Medical Entomology and Zoology* 64: 83–101. <https://doi.org/10.7601/mez.64.83>
- Kurahashi H, Kakinuma S (2015) Key to the flesh flies of Japan, with the description of new genus and species from Honshu (Diptera: Sarcophagidae). *Medical Entomology and Zoology* 66: 167–200. <https://doi.org/10.7601/mez.66.167>
- Kurahashi H, Leh MU (2007) The flies from Sarawak, East Malaysia (Diptera: Muscidae, Calliphoridae, Sarcophagidae and Tachinidae). *Medical Entomology and Zoology* 58: 261–273. <https://doi.org/10.7601/mez.58.261>
- Kurahashi H, Tan SH (2009) The sarcophagid flies from Peninsular Malaysia (Diptera: Sarcophagidae). *Medical Entomology and Zoology* 60: 283–296. <https://doi.org/10.7601/mez.60.283>
- Kurtpınar H (1950) Spesifik bir myiasis amili olan *Wohlfahrtia magnifica* (Sciner 1862) nın Türkiye ehli hayvanlarındaki rolü. *Türk Veteriner Hekimleri Derneği Dergisi* 20: 1–7.
- Lehrer AZ (1975) Sur *Sarcophaga rosellei* Böttcher, 1912 et deux espèces affines nouvelles (Diptera, Sarcophagidae). *Bulletin et Annales de la Royale Société Entomologique de Belgique* 111: 278–284.
- Lehrer AZ (1976a) *Leclercqiomyia*: genre nouveau de sarcophagines paléarctiques (Diptera: Sarcophagidae). *Bulletin et Annales de la Royale Société Entomologique de Belgique* 112: 195–203.
- Lehrer AZ (1976b) Nouvelles sarcophagines d’Eurasie (Diptera, Sarcophagidae). *Bulletin et Annales de la Royale Société Entomologique de Belgique* 112: 259–266.
- Lehrer AZ (1977) Deux nouvelles *Heteronychia* de Turquie (Diptera: Sarcophagidae). *Bulletin et Annales de la Royale Société Entomologique de Belgique* 113: 223–228.
- Lehrer AZ (1996) Trois Sarcophagines méditerranéennes nouvelles (Diptera, Sarcophagidae). *Mitteilungen der Schweizerischen Entomologischen Gesellschaft* 69: 261–270.
- Lehrer AZ (1999a) Zwei neue paläarktische Arten der gattung *Heteronychia* Brauer & Bergentamm 1889 (Diptera, Sarcophagidae). *Entomologische Zeitschrift* 109: 409–414.
- Lehrer AZ (1999b) Revision de “*Sarcophaga bergi* Auct.” et description d’une nouvelle espèce du genre *Sarcophaga* Meigen (Diptera, Sarcophagidae). *Bulletin de la Société Entomologique de Mulhouse* 10–12: 53–58.
- Lehrer AZ (2000) Taxonomische Klärung der afrotropischen Gattungen *Uroxanthisca* Rohdendorf, 1963, und *Parasarcophaga* Johnston & Tiegs, 1921, nebst Beschreibung zweier Sarcophaginae –Arten (Diptera: Sarcophagidae). *Entomologische Zeitschrift* 110: 155–158.
- Lehrer AZ (2003) Sarcophaginae de l’Afrique (Insecta, Diptera, Sarcophagidae). *Entomologica* 37: 5–528.

- Lehrer AZ (2004) Révision de l'espèce *Sarcophaga protuberans* Pandellé 1896, et description de trois espèces ouestpaléarctiques du genre *Pandelleana* Rohdendorf, 1937 (Diptera, Sarcophagidae). Bulletin de la Societe Entomologique de Mulhouse 60: 55–64.
- Lehrer AZ (2006a) Contributions zoogéographiques sur les Sarcophaginae afrotropicaux (Diptera, Sarcophagidae). Fragmenta Dipterologica 2: 19–23.
- Lehrer AZ (2006b) Liste des Sarcophaginae et Paramacronychiinae du Proche Orient, identifiés dans les collections de TAU (Diptera, Sarcophagidae). Fragmenta dipterologica 3: 14–22.
- Lehrer AZ (2007) Un nouveau sarcophile de la faune d'Israel (Diptera, Sarcophagidae). Fragmenta Dipterologica 8: 3–5.
- Lehrer AZ (2008a) *Blaesoxipha ataturkia* n. sp. Une espèce nouvelle du genre *Blaesoxipha* Loew. Fragmenta Dipterologica 14: 25–28.
- Lehrer AZ (2008b) A propos de l'espèce *Pandelleola taurica* Rohdendorf et description de nouveaux taxons congénériques (Diptera, Sarcophagidae). Fragmenta Dipterologica 15: 1–6.
- Lehrer AZ, Oprisan D (2012) Deux nouvelles espèces de la faune de Roumanie et leurs implication dans la taxonomie des Sarcophagidae (Diptera). Fragmenta Dipterologica 33: 28–34.
- Lopes HS de (1958) Diptera: Sarcophagidae. Insects of Micronesia 13(2): 15–49.
- Lopes HS de (1959) A revision of Australian Sarcophagidae (Diptera). Studia Entomologica 2: 33–67.
- Lopes HS de (1961) Hawaiian Sarcophagidae (Diptera). Proceedings of the Hawaiian Entomological Society 17: 419–427.
- Lopes HS de (1967) (Noona Dan Papers No 44). Some Sarcophagidae (Diptera) from the Bismarck Islands and the Philippines. Entomologische Meddelelser 35: 143–176.
- Ma G, Ji Y, Wang M (2014) A taxonomic study of Calyptratae in Taiyue Mountain of Shanxi province, China. Chinese Journal of Vector Biology and Control 25: 444–451.
- Magnarelli LA, Andreadis TG (1981) Human cases of furuncular, traumatic, and nasal myiasis in Connecticut. American Journal of Tropical Medicine and Hygiene 30: 894–896. <https://doi.org/10.4269/ajtmh.1981.30.894>
- Martínez-Sánchez A, Rojo S, Marcos-Garsía MA (2000) Sarcófagos necrófagos y coprófagos asociados a un agroecosistema de dehesa (Diptera, Sarcophagidae). Boletín de la Asociación Española de Entomología 24: 171–185.
- Maurya RP, Mishra D, Bhushan P, Singh VP, Singh MK (2012) Orbital myiasis: due to invasion of larvae of flesh fly (*Wohlfahrtia magnifica*) in a child; rare presentation. Case Reports in Ophthalmological Medicine, Art. ID 371498: 1–2.
- Meiklejohn KA (2012) Taxonomy and systematics of the Australian Sarcophaga s. l. (Diptera: Sarcophagidae). Doctor of Philosophy thesis. School of Biological Sciences, University of Wollongong, Australia, 163 pp.
- Nandi BC (2002) Diptera Sarcophagidae. Fauna of India and the Adjacent Countries 10: i–xiv, 1–608.
- Nash R (2005) Two unpublished cases of myiasis. Diptera Info: 1. http://www.diptera.info/articles.php?article_id=8
- Nazni WA, Nooraidah H, Jeffery J, Azahari AH, Mohd Noor I, Sadiyah I, Lee HL (2007) Distribution and abundance of diurnal and nocturnal dipterous flies in the Federal Territory, Putrajaya. Tropical Biomedicine 24: 61–66.

- Nishida GM (2008) French Polynesia fly checklist. Bishop Museum Press, Honolulu: 17 pp.
- Orian AJE (1962) A list of Diptera recorded from Mauritius. Bulletin of the Mauritius Department of Agriculture 94: 1–31.
- Övet G, Tezer MS, Alataş N, Kocacan FN (2012) Aural myiasis in a patient with chronic otitis media. Turkish Archives of Otolaryngology 50: 5–7.
- Özdal N, Değer S (2005) Identification and development of several traumatic myiasis larvae recorded in Van. Yüzüncü Yıl Üniversitesi, Veteriner Fakültesi Dergisi 16: 81–85.
- Özdemir EÇ, Fahriye Ekşi F, Şenyurt SZ, Üstün K, Karaoğlu I, Erciyas K (2014) A case of gingival myiasis caused by *Wohlfahrtia magnifica*. Mikrobiyologii Bülteni 48: 512–517. <https://doi.org/10.5578/mb.7563>
- Özsoy IP, Dik B, Alptekin NO (2013) A case of oral myiasis due to larvae of *Wohlfahrtia magnifica*. International Association for Dental Research, Poster Session 132: 1.
- Pai Ch-Y, Kurahashi H, Deng R-L, Yang Ch-H (2014) Identification of forensically important Sarcophagidae (Diptera) by DNA-based method coupled with morphological characteristics. Romanian Journal of Legal Medicine 22: 209–214. <https://doi.org/10.4323/rjlm.2014.209>
- Pakalniškis S, Podėnas S (1992) 258 new to Lithuania Diptera species found in 1964–1992: pp. 56–82. In: Jonaitis V (Ed.) New and Rare for Lithuania Insect Species. Records and Distributions of 1992. Institute of Ecology, Vilnius, 115 pp.
- Pape T (1991) *Sarcophaga cruentata* Meigen, 1826 – first record from the Australasian Region (Diptera, Sarcophagidae). Japanese Journal of Entomology 59: 213–214.
- Pape T (1994) The world *Blaesoxipha* Loew, 1861 (Diptera: Sarcophagidae). Entomologica scandinavica, Suppl. 45: 1–247.
- Pape T (1996) Catalogue of the Sarcophagidae of the world (Insecta: Diptera). Memoirs of Entomology, International 8: 1–558.
- Pape T (2004) The Sarcophagidae (Insecta: Diptera) described by Louis Pandellé. Zootaxa 722: 1–64. <https://doi.org/10.11646/zootaxa.485.1.1>
- Pape T, Beuk P, Pont AC, Shatalkin AI, Ozerov AL, Woźnica AJ, Merz B, Bystrowski C, Raper C, Bergström C, Kehlmaier C, Clements DK, Greathead D, Kameneva EP, Nartshuk E, Petersen FT, Weber G, Bächli G, Geller-Grimm F, Van de Weyer G, Tschorsnig H-P, de Jong H, van Zuijlen J-W, Vaňhara J, Roháček J, Ziegler J, Majer J, Hůrka K, Holston K, Rognes K, Greve-Jensen L, Munari L, de Meyer M, Pollet M, Speight MCD, Ebejer MJ, Martinez M, Carles-Tolrá M, Földvári M, Chvála M, Barták M, Evenhuis NL, Chandler PJ, Cerretti P, Meier R, Rozkosny R, Prescher S, Gaimari SD, Zatwarnicki T, Zeegers T, Dikow T, Korneyev VA, Richter VA, Michelsen V, Tanasijtshuk VN, Mathis WN, Hubenov Z, de Jong Y (2015) Fauna Europaea: Diptera –Brachycera. Biodiversity Data Journal 3: e4187. <https://doi.org/10.3897/BDJ.3.e4187>
- Pape T, González-Mora D, Peris SV, Báez M (2002) Sarcophagidae. In: Carles –Tolrá Hjorth–Andersen M (coordinator). Catálogo de los Diptera de España, Portugal y Andorra (Insecta). Monografías SEA 8: 218–221.
- Parker RR (1914) Summary of report to the Montana State Board of Entomology concerning fly investigations conducted in the Yellowstone Valley during the summer of 1914. First Biennial Report of the Montana State Board Entomology (1913–1914): 35–50.

- Pekbey G (2011) Bayburt, Erzincan ve Erzurum İlleri Sarcophagidae (Diptera) Türleri Üzerinde Sistemik ve Faunistik Çalışmalar. PhD thesis. Atatürk Üniversitesi, Fen Bilimleri Enstitüsü, Bitki Koruma Anabilimdalı, Erzurum, 344 pp.
- Pekbey G (2017) Distribution and identification of Turkish *Sarcophaga* (s. str.) Meigen, 1826 (Diptera: Sarcophagidae). Turkish Journal of Science 2: 15–20. <https://doi.org/10.1063/1.4981712>
- Pekbey G, Eroğlu Z (2017) Sarcophagidae (Diptera) fauna of Artvin, Iğdır and Kars provinces of Turkey. American Institute of Physics, Conference Proceedings 1833(020064): 1-5.
- Pekbey G, Hayat R (2010) Faunistic studies on the family Sarcophagidae (Diptera) species from Erzurum province (Turkey). Turkish Journal of Zoology 34: 263–275. [In Turkish with English summary]
- Pekbey G, Hayat R (2011) New records and distributional data on *Sarcophaga* (*Heteronychia*) (Diptera: Sarcophagidae) from Turkey. A partial summary of Gamze Pekbey's PhD thesis (Ataturk University, Institute of Science, Department of Plant Protection), adopted on 20.06.2011 <http://online.journals.tubitak.gov.tr/open>
- Pekbey G, Hayat R (2013a) New records and distributional data on *Sarcophaga* (*Heteronychia*) (Diptera: Sarcophagidae) from Turkey. Turkish Journal of Zoology 37: 458–461. <https://doi.org/10.3906/zoo-1208-28>
- Pekbey G, Hayat R (2013b) New records of Miltogramminae and Paramacronychiinae (Diptera: Sarcophagidae) from Turkey. Turkish Journal of Zoology 37: 514–518. <https://doi.org/10.3906/zoo-1207-1>
- Pekbey G, Hayat R (2013c) New records and updated distributions of *Blaesoxipha* Loew, 1861 (Diptera: Sarcophagidae) from Turkey. Journal of the Entomological Research Society 15: 25–36.
- Pekbey G, Hayat R, Richet R (2011a) *Sarcophaga* (*Heteronychia*) *turana* (Rohdendorf, 1937). Türkiye et sinekleri (Diptera: Sarcophagidae) faunası için yeni bir kayıt. Türkiye IV. Bitki Koruma Kongresi, 28–30 Haziran 2011, Kahramanmaraş, 194.
- Pekbey G, Hayat R, Richet R, Blackith RM (2011b) A new species of *Sarcophaga* (*Sarcophaga*) (Diptera: Sarcophagidae) from Turkey. Turkish Journal of Entomology 35: 285–293.
- Peris SV, González-Mora D, Mingo E (1999) The Parasarcophagina of the Iberian Peninsula (Diptera, Sarcophagidae). Boletín de la Real Sociedad Española de Historia Natural (Sección Biológica) 95: 115–134.
- Piwczyński M, Pape T, Deja-Sikora E, Sikora M, Akbarzadeh K, Szpila K (2017) Molecular phylogeny of Miltogramminae (Diptera: Sarcophagidae): Implications for classification, systematics and evolution of larval feeding strategies. Molecular Phylogenetics and Evolution 116: 49–602. <https://doi.org/10.1016/j.ympev.2017.07.001>
- Popov GB (1959) The desert locust (*Schistocerca gregaria* Forskal) in the island of Socotra. Journal of Animal Ecology 28: 89–95. <https://doi.org/10.2307/2016>
- Pohjoismäki JLO, Kahanpää J (2014) Checklist of the superfamilies Oestroidea and Hippoboscoidea of Finland (Insecta, Diptera). In: Kahanpää J, Salmela J (Eds) Checklist of the Diptera of Finland. ZooKeys 441: 383–408. <https://doi.org/10.3897/zookeys.441.7252>
- Povolný D (1987) Male genitalia of the *Parasarcophaga dux* (Thomson) – group of the subgenus *Liosarcophaga* Enderlein, 1928 (Diptera, Sarcophagidae). ActaEntomologica Musei Nationalis Pragae 42: 149–187.

- Povolný D (1992) Zum Schneckenparasitismus und zur Taxonomie einiger Sarcophagini-Arten (Diptera, Sarcophagidae). *Acta Universitatis Agriculturae Brunensis*, A, 40: 169–185.
- Povolný D (1999) Three new Mediterranean taxa of flesh –flies and additional notes on their synecology (Diptera, Sarcophagini). *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis* 47: 7–21.
- Povolný D, Hula V (2004) On an invasion of the flesh –fly *Liosarcophaga aegyptica* (Salem, 1935) into Central Europe with the discovery of *Helicophagella verstraeteni* (Lehrer, 1975) in East Slovakia (Diptera, Sarcophagidae). *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis* 52: 91–101. <https://doi.org/10.11118/actaun200452040091>
- Povolný D, Verves YuG (1997) The flesh –flies of Central Europe (Insecta, Diptera, Sarcophagidae). *Spixiana*, Suppl. 24: 1–264.
- Prado e Castro C, Arnaldos MI, García MD (2010) Additions to the Calliphoridae (Diptera) fauna from Portugal, with description of new records. *Boletín de Asociación Española de Entomología* (2009)33: 425–437.
- Rebelo M, Meireles J, Moreira A, Fonseca IP da (2014) Entomologia forense médico –veterinária. *Revista Portuguesa de Ciências Veterinárias* 109: 62–69.
- Reed JP (1974) A revision of the Sarcophaginae of the Madagascan zoogeographical region, with a description of a new species (Diptera: Sarcophagidae). *Zeitschrift für Angewandte Zoologie* 61: 191–211.
- Rees NE (1985) Suitability of selected North American grasshopper species in hosts for grasshopper parasites from Pakistan. *Agriculture, Ecosystems & Environment* 12: 157–163. [https://doi.org/10.1016/0167-8809\(85\)90077-5](https://doi.org/10.1016/0167-8809(85)90077-5)
- Richet R, Blackith RM, Pape T (2011) *Sarcophaga* of France (Diptera: Sarcophagidae). *Pensoft Series Faunistica* 97: 1–327.
- Rohdendorf BB (1937) Sarcophagidae. I. Sarcophaginae. *Fauna SSSR. Nasekomye Dvukrylye*, 19, Pt 1: 1–501. [In Russian with German summary]
- Rohdendorf BB (1975) Some Sarcophagidae from southern Spain. *Steenstrupia* 3: 197–204.
- Rouse EP (1967) The problem of insect identification and the University of Arkansas reference collection. *Proceedings of the Arkansas Academy of Science* 21: 45–48.
- Şaki E, Özer E (1999a) Morphology and development of several external myiasis larvae recorded in Elazığ. *Turkish Journal of Veterinary and Animal Science* 23 Suppl. 4: 723–731.
- Şaki E, Özer E (1999b) Morphology and seasonal distributions of external myiasis flies determined in Elazığ province. *Turkish Journal of Veterinary and Animal Science* 23 Suppl. 4: 733–746.
- Salem HH (1935) The Egyptian species of the genus *Sarcophaga*. *Egyptian University. Faculty of Medicine, Publ.* 5: 1–61.
- Salem HH (1946) New species of *Sarcophaga* (Diptera – Sarcophagidae) from the Australasian Region and its neighbouring islands. *Bulletin de l’Institut d’Égypte* 27 : 183–213.
- Senior-White RA, Aubertin D, Smart J (1940) Diptera. Family Calliphoridae. *The Fauna of British India, including the remainder of the Oriental region* 6: 1–288.
- Sevgili M, Şaki CE, Özkutlu Z (2004) External myiasis in the Şanlıurfa Province: The distribution of flies. *Turkish Journal of Parasitology* 28: 150–153.

- Shazia MT, Anjum S, Yousuf MJ (2006) Systematics and population of sarcophagid flies in Faisalabad (Pakistan). *International Journal of Agriculture and Biology* 8: 809–811.
- Shinonaga S (2001) Filth flies collected by the late Dr. T. Ohse in Ethiopia and thirteen African countries with record of Dr. Kano's collection in Africa. 2. Calliphoridae and Sarcophagidae. *Medical Entomology and Zoology* 52: 209–217. <https://doi.org/10.7601/mez.52.209>
- Shinonaga S (2004) Record of the Sarcophagid flies collected in Indonesia (Diptera, Sarcophagidae, Sarcophaginae). *Japanese Journal of Systematic Entomology* 10: 281–296.
- Shinonaga S, Thinh TH (2003) Records of the sarcophagid flies (Diptera: Sarcophagidae) from Vietnam. *Medical Entomology and Zoology* 54: 331–335. <https://doi.org/10.7601/mez.54.331>
- Sijstermans L (2012) Verslag Dipteraweekend 2011 in Goes. *De Vliegenmepper* 21: 9–18.
- Silahuddin SA, Latif B, Kurahashi H, Walter DE, Heo CC (2015) The importance of habitat in the ecology of decomposition on rabbit carcasses in Malaysia: implications in forensic entomology. *Journal of Medical Entomology* 52: 9–23. <https://doi.org/10.1093/jme/tju001>
- Sinha SK (2014) New records of Calyptrate flies (Diptera) from the State of Jharkhand, India. *Prommalia* 2: 1–22.
- Sisojević P, Čepelák J (1998) Contribution to the fauna of higher flies (Diptera, Calliphoridae, Sarcophagidae, Rhinophoridae) of the Mountain Kopaonik. *Zbornik Radova o Fauni Srbije* 5: 73–90.
- Sjüstedt Y (1935) Entomologische Ergebnisse der Schwedischen Kamtschatka –Expedition 1920–1922, 37. Abschluss und Zusammenfassung. *Arkiv für Zoologie* 28: 1–19.
- Snow FH (1904) Lists of Coleoptera, Lepidoptera, Diptera and Hemiptera collected in Arizona by the entomological expeditions of the University of Kansas in 1902 and 1903. *Scientific Bulletin of the University of Kansas* 2: 323–350.
- Soler-Cruz MD (2000) The study of myiasis in Spain during the past century years. *Ars Pharmaceutica*, 41: 19–26.
- Spuris Z (1976) Dzintas Sarcophagidae musas Gaujas senleja pie Siguldas. *Latvijas Entomologs* 18: 39–40.
- Stamper TI (2008) Improving the accuracy of postmortem interval estimations using carrion flies (Diptera: Sarcophagidae, Calliphoridae and Muscidae). A dissertation submitted to the Graduate School of the University of Cincinnati in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the Department of Biological Sciences of the McMicken College of Arts and Sciences, 111 pp.
- Strickland EH (1938) An annotated list of the Diptera (flies) of Alberta. *Canadian Journal of Research. Section D. Zoological Science* 16: 175–219. <https://doi.org/10.1139/cjr38d-012>
- Strukan D (1968) *Phytosarcophaga destructor* Malloch – novi član faune Jugoslavije i evropskog kopna. *Zbornik za prirodne nauke, Matica Srpska* 34: 163–145.
- Strukan D (1970) Parasarcophagina Jugoslavije (Sarcophagidae –Diptera). *Zbornik za prirodne nauke, Matica Srpska* 38: 91–114.
- Sucharit S, Tumrasvin W, Vutikes S (1976) A survey of houseflies in Bangkok and neighboring provinces. *Southeast Asian Journal of Tropical Medicine and Public Health* 7: 85–90.
- Sugiyama E, Shinonaga S, Kano R (1987) Sarcophaginae in Taiwan (Diptera: Sarcophagidae). *Sieboldia, Suppl.*: 61–81.

- Sugiyama E, Shinonaga S, Kano R (1988) The tribe Sarcophagini from New Guinea with the description of a new species (Diptera: Sarcophagidae). Japanese Journal of Sanitary Zoology 39: 283–292. <https://doi.org/10.7601/mez.39.283>
- Szpila K (2010) The first instar of European Miltogramminae (Diptera: Sarcophagidae). Wydawnictwo Naukowe UMK, Toruń, 272 pp.
- Tan SH, Rizman-Idid M, Mohd-Aris E, Kurahashi H, Mohamed Z (2010) DNA –based characterization and classification of forensically important flesh flies (Diptera: Sarcophagidae) in Malaysia. Forensic Science International 199: 43–49. <https://doi.org/10.1016/j.forsciint.2010.02.034>
- Thinh TH (1988) The synanthropic and synbovine flies in Taynguen, Part I: Key to the species. Journal of Biology 10: 10–16.
- Thinh TH (2004) Altitudinal distribution of the Muscidae, Calliphoridae and Sarcophagidae in Vietnam. Part 2: the species at altitude over 1200 m. Journal of Biological Sciences 26: 4–10.
- Tschirnhaus MV, Irwin M, Hauser M, Evenhuis N, Pape T (2000) Provisional checklist of the Agromyzidae, Therevidae, Mythicomyiidae, Sarcophagidae and Stratiomyidae (Diptera) of the Brandberg Massif, Namibia. Cimbebasia Memoir 9: 383–384.
- Tucker ES (1906) Contributions towards a catalogue of the insects of Kansas. Transactions of the Kansas Academy of Sciences 20: 190–201. <https://doi.org/10.2307/3624656>
- Tuygun N, Taylan-Ozkan A, Tanır G, Mumcuoğlu KY (2009) Furuncular myiasis in a child caused by *Wohlfahrtia magnifica* (Diptera: Sarcophagidae) associated with eosinophilia. Turkish Journal of Pediatrics 51: 279–281.
- Udgaonkar US, Dharamsi R, Kulkarni SA, Shah SR, Patil SS, Bhosale AL, Gadgil SA, Mohite RS (2012) Intestinal myiasis. Indian Journal of Medical Microbiology 30: 332–337. <https://doi.org/10.4103/0255-0857.99496>
- Ütük AE (2006) Traumatic myiasis in a dog. Fırat Üniversitesi Sağlık Bilimleri Veteriner Dergisi 20: 97–99.
- Vairo KP, Mello-Patiu CA de, Carvalho CJB de (2011) Pictorial identification key for species of Sarcophagidae (Diptera) of potential forensic importance in southern Brazil. Revista Brasileira de Entomologia 55: 333–347. <https://doi.org/10.1590/S0085-56262011005000033>
- Verves YuG (1978) On fauna of Sarcophaginae (Diptera, Sarcophagidae) of Caucasus. Scientific Reports of High School. Biological Sciences 3: 36–45.
- Verves YuG (1986a) Family Sarcophagidae. In: Soós Á, Papp L (Eds) Catalogue of Palearctic Diptera. Vol. 12. Calliphoridae – Sarcophagidae. Budapest, Amsterdam, New York, 58–193.
- Verves YuG (1986b) A present status of the knowledge of Sarcophagidae (Diptera) fauna of the world. Problems of General and Molecular Biology 5: 3–15.
- Verves YuG (1987) Results of analysis of system of sarcophagids (Sarcophagidae) of the world on synapomorphic characters. In: Narchuk EP (Ed.) Two –winged insects: systematics, morphology, ecology. Leningrad, 13–16.
- Verves YuG (1988) The importance of construction of the pharyngeal structures of the first stage larvae for the taxonomy of Palearctic Sarcophagidae (Diptera). In: Dolin VG (Ed.) Ecology and Taxonomy of the Ukrainian Insects. Kiev, 99–107.
- Verves YuG (1989a) The phylogenetic systematics of the miltogrammatine flies (Diptera, Sarcophagidae) of the world. Japanese Journal of Medical Sciences, Biology 42: 111–126. <https://doi.org/10.7883/yoken1952.42.111>

- Verves Yu (1989b) A review of the subtribes Phytosarcophagina, Erwinlindneriina, Kozloveina and Xanthopteriscina (Sarcophagini, Sarcophaginae, Sarcophagidae, Diptera). Scientific Report of High School, Biological Sciences 2: 31–37.
- Verves YuG (1989c) A review of the subtribes Harpagophallina i Heteronychiina (Diptera, Sarcophagidae). Zoologicheskii Zhurnal 68: 89–97.
- Verves YuG (1990a) Prof. Hugo de Souza Lopes and the modern system of Sarcophagidae (Diptera). Memórias do Instituto Oswaldo Cruz (1989) 84 Suppl. 4: 529–545.
- Verves YuG (1990b) The system of the Sarcophagidae of the world. – 2nd International Congress of Dipterology. Bratislava, Aug. 27 – Sept. 1, 1990. Abstract Volume, 253 pp.
- Verves YuG (1993a) Palaearctic species of the genus *Craticulina* (Diptera, Sarcophagidae). Vestnik Zoologii 27: 9–17.
- Verves YuG (1993b) 64h. Sarcophaginae. In: Lindner E (Ed.). Die Fliegen der Paläarktischen Region 11: 441–504.
- Verves YuG (1994) A key to genera and subgenera of Palaearctic Miltogrammatinae (Diptera: Sarcophagidae) with a description of a new genus. International Journal of Dipterological Research 5: 239–247.
- Verves YuG (1997) Taxonomic notes on some Sarcophagini (Sarcophagidae, Diptera). Journal of Ukrainian Entomological Society 3: 37–62.
- Verves YuG (1998) To the knowledge of the subfamilies of the Sarcophagidae (Diptera). International Journal of Dipterological Research 9: 243–244.
- Verves YuG (2001a) The composition of Paramacronychiinae (Sarcophagidae, Diptera) with the descriptions of two new genera. International Journal of Dipterological Research 12: 145–149.
- Verves YuG (2001b) The annotated list of Sarcophagidae (Diptera) of Indian peninsula. International Journal of Dipterological Research 12: 233–248.
- Verves YuG (2003) A preliminary list of species of Calliphoridae and Sarcophagidae (Diptera) of the Republic of Seychelles. Phelsuma, 11, Suppl. A: 1–16.
- Verves YuG (2007) The new faunistic data on Calliphoridae and Sarcophagidae (Diptera) of the Republic of Seychelles. Phelsuma 15: 71–81.
- Verves YuG, Barták M, Kubík Š (2015a) Sarcophagidae (Diptera) of Vráž near Písek (Czech Republic). In: Kubík Š, Barták M (Eds) 7th Workshop on Biodiversity. Jevany, Česká Zemědělská Univerzita v Praze, 68–79.
- Verves YuG, Barták M, Kubík Š, Civelek HS (2017) New records of Sarcophagidae from Turkey (Diptera). ZooKeys 703: 129–158. <https://doi.org/10.3897/zookeys.703.12377>
- Verves YuG, Radchenko V, Khrokalo L (2015b) A review of species of subtribe Apodacrina Rohdendorf, 1967 with description of a new species of *Apodacra* Macquart, 1854 from Turkey (Insecta: Diptera: Sarcophagidae: Miltogramminae: Miltogrammini). Turkish Journal of Zoology 39: 263–278. <https://doi.org/10.3906/zoo-1312-14>
- Verves YuG, Radchenko V, Khrokalo L (2017) Description of a new species of *Liosarcophaga* (s. str.) from Turkey (Diptera: Sarcophagidae: Sarcophagini). Zoology in the Middle East 63: 76–81. <https://doi.org/10.1080/09397140.2017.1292643>
- Verves YuG, Khrokalo LA (2006a) Review of Macronychiinae (Diptera, Sarcophagidae) of the world. Vestnik Zoologii 40: 219–239.

- Verves YuG, Khrokalo LA (2006b) 123. Fam. Sarcophagidae – sarcophagids. Key to the insects of Russian Far East 6: 64–178.
- Verves YuG, Khrokalo LA (2009) 14. Superfamily Oestroidea. Family Sarcophagidae. In: Gerlach J (Ed.) The Diptera of the Seychelles islands. Pensoft Series Faunistica 85: 270–303.
- Verves YuG, Khrokalo LA (2014a) An annotated list of the Sarcophagidae (Macronychiinae, Miltogramminae, Eumacronychiinae and Paramacronychiinae) recorded in Ukraine (Diptera). CESA News 95: 1–47.
- Verves YuG, Khrokalo LA (2014b) An annotated list of the Sarcophaginae (Sarcophagidae) recorded in Ukraine (Diptera). CESA News 101: 7–81.
- Verves YuG, Khrokalo LA (2015) Review of Heteronychiina (Diptera, Sarcophagidae). Priamus, Suppl. 36: 1–60.
- Verves YuG, Khrokalo LA (2017) A review of subtribe Phrosinellina Verves, 1989, with description of *Phrosinella (Asiometopia) kocaki* sp. nov. from the Middle East (Diptera: Sarcophagidae: Miltogramminae: Metopiaini). Turkish Journal of Zoology 41: 43–59. <https://doi.org/10.3906/zoo-1512-60>
- Wang Y, Cheng X, Wang M (2009) Study on Calyptratae fauna in Heng Mountain Range of Shanxi province. Chinese Journal of Vector Biology & Control 20: 397–400.
- Webster FM (1907) The value of parasites in central and forage crop production. Bulletin of United States Department of Agriculture, Bureau of Entomology 67: 94–100.
- Wei LM (2007) Sarcophagidae. In: Li ZZ, Yang MF, Jin DC (Eds) Insects from Leigongshan Landscape, pp. 526–539. Guizhou Science & Technology Press, Guiyang, 759 pp.
- Whitmore D (2009) A review of the *Sarcophaga (Heteronychia)* (Diptera: Sarcophagidae) of Sardinia. Zootaxa 2318: 566–588.
- Whitmore D (2010) Systematics and phylogeny of *Sarcophaga (Heteronychia)* (Diptera: Sarcophagidae). Ph. D. dissertation. Dipartimento di biologia animale e dell'uomo, Università di Roma “La Sapienza” scuola di dottorato in biologia animale 22: 1–257.
- Whitmore D (2011) New taxonomic and nomenclatural data on *Sarcophaga (Heteronychia)* (Diptera: Sarcophagidae), with description of six new species. Zootaxa 2778: 1–57.
- Whitmore D, Pape T, Cerretti P (2013) Phylogeny of *Heteronychia*: the largest lineage of *Sarcophaga* (Diptera: Sarcophagidae). Zoological Journal of the Linnean Society 169(3): 604–639. <https://doi.org/10.1111/zoj.12070>
- Williams RW (1956) Studies on the filth flies at the University of Michigan Biological Station, Douglas Lake, Michigan. Summer 1954. American Midland Naturalist 55: 126–130. <https://doi.org/10.2307/2422327>
- Wobeser G, Gajakhar A, Beyersbergen GW, Sugden LG (1981) Myiasis by *Wohlfahrtia opaca* a cause of mortality of newly hatched wild duckings. Canadian Field Naturalist 95: 471–473.
- Wyatt NP (1991) Notes on Sarcophagidae (Dipt.), including one species new to Ireland, one new to science from England and Malta and a change in the British List. Entomologist's Monthly Magazine 127: 1–6.
- Wyatt NP, Falk SJ (1995) British species of *Metopia* (Diptera: Sarcophagidae) with two species new to Britain. British Journal of Entomology and Natural History 8: 33–35.

- Xue W, Verves YuG (2009) *Perisimyia perisi*, a new genus and species from South China (Diptera: Sarcophagidae). Boletín de la Asociación Española de Entomología 33: 43–58.
- Xue W, Verves YuG, Du J (2011) A review of subtribe Boettcheriscina Verves 1990 (Diptera: Sarcophagidae), with descriptions of a new species and genus from China. Annales de la Société Entomologique de France (N. S.) 47: 303–329.
- Xue W, Verves YuG, Wang P (2015) Review of *Senotainia* Macquart with a new species from South China (Diptera: Sarcophagidae: Miltogramminae). Journal of Shenyang Normal University (Natural Science Edition) 33: 447–454.
- Yazgi H, Uyanik MH, Yörük O, Aslan I (2009) Aural myiasis by *Wohlfahrtia magnifica*: case report. The Eurasian Journal of Medicine 41: 194–196
- Yuca K, Çaksen H, Sakin YF, Yuca SA, Kiriş M, Yilmaz H, Cankaya H (2005) Aural myiasis in children and literature review. Tohoku Journal of Experimental Medicine 206: 125–130. <https://doi.org/10.1620/tjem.206.125>
- Zaidi F, Fatima SH, Gul A (2016) Dataset of traumatic myiasis observed for three dominant screw worm species in North West Pakistan with first report of *Wohlfahrtia magnifica* (Schiner). Data in Brief 8: 1333–1337. <https://doi.org/10.1016/j.dib.2016.07.053>
- Zaidi F, Wei SJ, Shi M, Chen XX (2011) Utility of multi –gene loci for forensic species diagnosis of blowflies. Journal of Insect Science 11: 1–12. <https://doi.org/10.1673/031.011.5901>
- Zerova MD, Romasenko LP, Seryogina LYa, Verves YuG (2006) Natural Insect Enemies of Solitary Bees of the Fauna of Ukraine, Veles, Kiev, 236 pp.
- Zhang B, Jia F, Liang G, Zhang S (2010) Species review of Sarcophagidae in Guangdong and Hainan provinces (Sarcophagidae: Diptera). Chinese Journal of Vector Biology and Control 21: 357–361.
- Zhang D, Zhang M, Wang C, Pape T (2016) Catalog of the Paramacronychiinae of China (Diptera: Sarcophagidae). Zootaxa 4208: 301–324. <https://doi.org/10.11646/zootaxa.4208.4.1>
- Zhang Q, Shi H, Dong S, Guo L, Zhao R, Li Jie, Li Jun, Xue X, You M (2014) Preliminary faunal study on calyptrate flies in frontier port area of Ningbo, China. Chinese Journal of Vector Biology and Control 25: 340–343.
- Zumpt F (1972) Calliphoridae (Diptera Cyclorrhapha). Part iv. Sarcophaginae. Exploration du Parc National des Virunda. Mission G. F. De Witte (1933–1935) 101: 1–264.